TWENTY-FOURTH ANNUAL REPORT

OF THE

DIRECTOR OF THE MINT

TO THE

SECRETARY OF THE TREASURY.

FOR THE

FISCAL YEAR ENDED JUNE 30, 1896.

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1897.

TREASURY DEPARTMENT.

Document No. 1924.

Director of the Mint.

REPORT

OF THE

DIRECTOR OF THE MINT.

TREASURY DEPARTMENT,
BUREAU OF THE MINT,
Washington, D. C., December 4, 1896.

SIR: I have the honor to submit, in compliance with section 345, Revised Statutes of the United States, the twenty-fourth annual report of the Director of the Mint, covering the operations of the mints and assay offices of the United States for the fiscal year ended June 30, 1896.

DEPOSITS OF GOLD.

The original deposits of gold during the fiscal year at the several mints and assay offices of the United States, including the gold contained in silver deposits, aggregated 3,696,354.381 standard ounces of the value of $68,769,383.81, an increase, as compared with the previous fiscal year, of 193,947.013 standard ounces of the value of $3,608,316.53.

During the fiscal year 1896 the redeposits of gold amounted to $34,541,741.92, showing an increase of $12,220,719.64 as compared with the same for the previous fiscal year, making an aggregate of $103,311,125.73 in the total amount deposited during the year.

The redeposits of gold consisted of fine and unparted bars transferred from the mint at Denver, Colo., and assay offices at Charlotte, N. C., St. Louis, Mo., Helena, Mont., and Boise, Idaho, to the mint at Philadelphia, Pa., and from the mint at Carson, Nev., to the mint at San Francisco, Cal., transferred for conversion into coin.

The classification and weight in standard ounces (900 fine) of the original deposits and redeposits of gold bullion at the mints and assay offices of the United States during the fiscal years 1895 and 1896, and the increase or decrease, are shown in the table following.

WEIGHT OF THE ORIGINAL DEPOSITS AND REDEPOSITS OF GOLD BULLION AT THE MINTS AND ASSAY OFFICES OF THE UNITED STATES DURING THE FISCAL YEARS 1895 AND 1896, AND THE INCREASE OR DECREASE OF THE SAME DURING THE LATTER YEAR.

Classification of deposits of gold.	Fiscal year.		Increase, 1896.	Decrease, 1896.
	1895.	1896.		
ORIGINAL DEPOSITS.				
Domestic production:	*Standard ozs.*	*Standard ozs.*	*Standard ozs.*	*Standard ozs.*
Crude bullion	844,179.943	875,086.598	30,906.655	
Refined bullion	1,540,812.363	2,022,627.342	481,814.979	
Domestic coin:				
Treasury transfers	11,592.240	44,013.190	32,420.950	
Purchased over the counter	52,276.638	45,749.608		6,527.030
Foreign bullion:				
Unrefined	138,899.201	133,207.063		5,692.138
Refined	619,429.220	220,058.907		399,370.313
Foreign coin	122,475.506	173,473.237	50,997.731	
Jewelers' bars, old plate, etc	172,742.257	182,138.436	9,396.179	
Total original deposits	3,502,407.368	3,696,354.381	605,536.494	411,589.481
REDEPOSITS.				
Fine bars	677,082.455	1,395,186.212	718,103.757	
Unparted bars	522,672.492	461,432.417		61,240.075
Total gold received	4,702,162.315	5,552,973.010	1,323,640.251	472,829.556

The classification and value of the original deposits and redeposits of gold bullion at the mints and assay offices of the United States during the fiscal years 1895 and 1896, and the increase or decrease, are fully shown in the following table:

VALUE OF THE ORIGINAL DEPOSITS AND REDEPOSITS OF GOLD BULLION AT THE MINTS AND ASSAY OFFICES OF THE UNITED STATES DURING THE FISCAL YEARS 1895 AND 1896, AND THE INCREASE OR DECREASE OF THE SAME DURING THE LATTER YEAR.

Classification of deposits of gold.	Fiscal year.		Increase, 1896.	Decrease, 1896.
	1895.	1896.		
ORIGINAL DEPOSITS.				
Domestic production:				
Crude bullion	$15,705,673.32	$16,339,336.75	$633,663.43	
Refined bullion	28,666,276.51	37,571,620.27	8,905,343.76	
Domestic coin:				
Treasury transfers	215,669.58	818,850.04	603,180.46	
Purchased over the counter	972,588.63	851,155.49		$121,433.14
Foreign bullion:				
Unrefined	2,584,171.18	2,478,270.93		105,900.25
Refined	11,524,264.56	4,094,119.21		7,430,145.35
Foreign coin	2,278,614.07	3,227,409.06	948,794.99	
Jewelers' bars, old plate, etc	3,213,809.43	3,388,622.06	174,812.63	
Total original deposits	65,161,067.28	68,769,383.81	11,265,795.27	7,657,478.74
REDEPOSITS.				
Fine bars	12,596,882.89	25,956,952.78	13,360,069.89	
Unparted bars	9,724,139.39	8,584,789.14		1,139,350.25
Total gold received	87,482,089.56	103,311,125.73	24,625,865.16	8,796,828.99

Uncurrent United States gold coins of the face value of $1,683,880.50 were received and melted at the mints and assay offices during the year. Of this amount, $825,583 were transferred from the Treasury of the United States for recoinage, the coining value of the same in new coin being $818,850.04; and the remainder, $858,297.50, the coining value of the same in new coin being $851,155.49, was received from individuals. The difference ($6,732.96) between the amount transferred from the Treasury for recoinage ($825,583) and the coining value ($818,850.04) was reimbursed the Treasurer from the appropriation "for loss on recoinage of uncurrent gold coin in the Treasury of the United States." The loss ($7,142.01) on the amount ($858,297.50) deposited by individuals was borne by the depositors.

DEPOSITS OF SILVER.

The original deposits of silver, including silver contained in gold deposits, during the fiscal year ended June 30, 1896, aggregated 10,030,691.88 standard ounces, having a coining value in standard silver dollars of $11,672,077.79, against 13,092,320.67 standard ounces, of the coining value of $15,234,700.35, for the fiscal year 1895, a decrease of $3,562,622.56.

The redeposits of silver bullion during the fiscal year 1896 at the mints and assay offices aggregated 151,780.37 standard ounces, of the coining value in silver dollars of $176,617.13, against 412,212.56 standard ounces, of the coining value of $479,665.51, for the previous fiscal year, a decrease of $303,048.38,

The following table exhibits the classification and weight of the original deposits and redeposits of silver bullion at the mints and assay offices of the United States for the fiscal years 1895 and 1896, and the increase or decrease:

WEIGHT OF THE ORIGINAL DEPOSITS AND REDEPOSITS OF SILVER BULLION AT THE MINTS AND ASSAY OFFICES OF THE UNITED STATES DURING THE FISCAL YEARS 1895 AND 1896, AND THE INCREASE OR DECREASE OF THE SAME DURING THE LATTER YEAR.

Classification of deposits of silver.	Fiscal year.		Increase, 1896.	Decrease, 1896.
	1895.	1896.		
ORIGINAL DEPOSITS.				
Domestic production:	*Standard ozs.*	*Standard ozs.*	*Standard ozs.*	*Standard ozs.*
Crude bullion	938,606.79	450,732.65	.....	487,874.14
Refined bullion	6,627,643.07	4,461,233.70	.....	2,166,409.37
Domestic coin:				
Treasury transfers	3,345,063.43	3,518,221.46	173,158.03	.....
Purchased over the counter.	5,552.37	4,655.16	.....	897.21
Trade dollars, purchased	389.93	199.18	.....	190.75
Foreign bullion:				
Unrefined	1,513,490.75	752,920.19	.....	760,570.56
Refined	.....	3,476.68	3,476.68	.....

WEIGHT OF THE ORIGINAL DEPOSITS AND REDEPOSITS OF SILVER BULLION AT THE MINTS AND ASSAY OFFICES OF THE UNITED STATES, ETC.—Continued.

Classification of deposits of silver.	Fiscal year.		Increase, 1896.	Decrease, 1896.
	1895.	1896.		
ORIGINAL DEPOSITS—cont'd.	*Standard ozs.*	*Standard ozs.*	*Standard ozs.*	*Standard ozs.*
Foreign coin	16,990.51	167,713.21	150,722.70	
Jewelers' bars, old plate, etc.	644,583.82	671,539,65	26,955.83	
Total original deposits	13,092,320.67	10,030,691.88	354,313.24	3,415,942.03
REDEPOSITS.				
Fine bars	146,764.07	19,092.63		127,671.44
Unparted bars	265,448.49	132,687.74		132,760.75
Total silver received	13,504,533.23	10,182,472.25	354,313.24	3,676,374.22

The classification and value of the original deposits and redeposits of silver bullion at the mints and assay offices of the United States during the fiscal years 1895 and 1896, and the increase or decrease, are shown by the following table:

VALUE OF THE ORIGINAL DEPOSITS AND REDEPOSITS OF SILVER BULLION AT THE MINTS AND ASSAY OFFICES OF THE UNITED STATES DURING THE FISCAL YEARS 1895 AND 1896, AND THE INCREASE OR DECREASE OF THE SAME DURING THE LATTER YEAR.

Classification of deposits of silver.	Fiscal year.		Increase, 1896.	Decrease, 1896.
	1895.	1896.		
ORIGINAL DEPOSITS.				
Domestic production:				
Crude bullion	$1,092,196.95	$524,488.87		$567,708.08
Refined bullion	7,712,166.48	5,191,253.77		2,520,912.71
Domestic coin:				
Treasury transfers	3,892,437.45	4,093,930.43	$201,492.98	
Purchased over the counter	6,460.93	5,416.91		1,044.02
Trade dollars, purchased	453.74	231.77		221.97
Foreign bullion.				
Unrefined	1,761,152.87	876,125.30		885,027.57
Refined		4,045.59	4,045.59	
Foreign coin	19,770.77	195,157.19	175,386.42	
Jewelers' bars, old plate, etc.	750,061.16	781,427.96	31,366.80	
Total deposits	15,234,700.35	11,672,077.79	412,291.79	3,974,914.35
REDEPOSITS.				
Fine bars	170,780.01	22,216.88		148,563.13
Unparted bars	308,885.50	154,400.25		154,485.25
Total silver received	15,714,365.86	11,848,694.92	412,291.79	4,277,962.73

The refined silver bullion classed as original deposits was the product of private refineries in the United States. As explained in former reports of this Bureau, silver bars, the product of private refineries in the United States, deposited at the mints and assay offices, are

always classed as of domestic production, although frequently to a large extent composed of silver derived from ore and bullion imported from Mexico and smelted and refined in the United States. Owing to this fact, the classification of silver bullion deposited as of domestic production at the mints and assay offices is not exact.

When either refined gold or silver bars bearing the stamp of private refineries of the United States are deposited, it is impracticable for the officers of the mints and assay offices to ascertain the sources of production—whether domestic or foreign, or the locality where produced—therefore the only alternative is to classify such deposits as of domestic production. Fortunately for statistical purposes, of the production of the precious metals at the close of each calendar year the private refiners courteously furnish statements to the Bureau of the Mint, showing the sources from which the gold and silver refined by them during the year is derived, exhibiting fully by individual States and Territories the amount of gold and silver produced from ores mined in each, and also the amount of gold and silver derived from bullion and ore imported from Mexico and British Columbia.

Tables will be found in the Appendix (III, IV, V, and VI, pp. 178–182) showing the distribution of the unrefined gold and silver bullion received by the mints and assay offices of the United States during the fiscal year among the States and Territories producing the same, and also tables (XXXV, and XXXVI, pp. 224–225) of deposits and purchases of gold and silver since 1792.

Worn, uncurrent, and mutilated domestic silver coins of the face value of $4,633,562.04 were received and melted at the mints during the fiscal year 1896. Of this sum, $4,627,141.46 were worn and uncurrent subsidiary silver coins transferred from the Treasury for recoinage, and the remainder, $6,420.58, multilated and uncurrent silver coins purchased at the current market price of silver bullion.

The value in new subsidiary silver coins of the amount transferred for recoinage was $4,377,258.40, showing a loss of $249,883.06, which was reimbursed the Treasurer of the United States from the appropriation "for loss on recoinage of worn and uncurrent silver coins in the Treasury."

A table will be found in the Appendix (IX, p. 186) showing by denominations and face value the uncurrent domestic coins received from the Treasury, and purchased over the counter, during the fiscal year 1896.

The coining value of gold and silver (exclusive of redeposits) received at the mints and assay offices of the United States each fiscal year from 1880 is shown in the table following.

VALUE OF THE GOLD AND SILVER (NOT INCLUDING REDEPOSITS) RECEIVED AT THE MINTS AND ASSAY OFFICES, 1880–1896.

Fiscal year.	Gold.	Silver (coining value).	Total value.
1880	$98,835,096	$34,640,522	$133,475,618
1881	130,833,102	30,791,146	161,624,248
1882	66,756,652	33,720,491	100,477,143
1883	46,347,106	36,869,834	83,216,940
1884	46,326,678	36,520,290	82,846,968
1885	52,894,075	36,789,774	89,683,849
1886	44,909,749	35,494,183	80,403,932
1887	68,223,072	47,756,918	115,979,990
1888	72,225,497	41,331,014	113,556,511
1889	42,136,436	41,238,151	83,374,587
1890	42,663,095	42,644,719	85,307,814
1891	48,485,801	71,985,985	120,471,786
1892	61,131,460	83,177,666	144,309,126
1893	46,449,842	84,233,832	130,683,674
1894	71,909,513	28,697,031	100,606,544
1895	65,161,067	15,234,700	80,395,767
1896	68,769,384	11,672,078	80,441,461

In the Appendix (I and II, pp. 172–174) will be found tables of deposits and purchases during the fiscal year 1896.

DEPOSITS OF GOLD, 1873–1896.

The value of the deposits of gold bullion, coin, and jewelers' bars at the mints and assay offices of the United States by fiscal years from 1873 to 1896 is exhibited in the following table:

DEPOSITS OF GOLD AT UNITED STATES MINTS AND ASSAY OFFICES, 1873–1896, INCLUSIVE.

Fiscal year ended June 30—	Character of gold deposited.					Total.
	Domestic bullion.	Domestic coin (coining value).	Foreign bullion.	Foreign coin (U. S. coining value).	Jewelers' bars, old plate, etc.	
1873..	$28,868,569.78	$27,116,948.27	$426,107.44	$518,542.14	$774,218.25	$57,704,385.88
1874..	29,736,387.82	6,275,367.29	3,162,519.92	9,313,882.47	654,353.56	49,142,511.06
1875..	34,266,124.52	1,714,311.50	739,439.66	1,111,792.26	724,625.96	38,556,293.90
1876..	37,590,529.39	417,947.15	1,141,905.76	2,111,083.80	681,819.32	41,943,285.42
1877..	43,478,103.93	447,339.68	1,931,163.12	2,093,260.73	837,911.25	48,787,778.71
1878..	48,075,123.76	301,021.79	2,068,679.05	1,316,461.09	907,932.20	52,669,217.89
1879..	38,549,705.89	198,083.17	1,069,796.89	1,498,819.71	937,751.14	42,254,156.80
1880..	35,821,705.40	209,328.82	21,200,997.23	40,426,559.63	1,176,505.77	98,835,096.85
1881..	35,815,036.55	440,776.97	37,771,472.26	55,462,385.74	1,343,430.93	130,833,102.45
1882..	31,298,511.97	599,356.80	12,783,807.04	20,304,810.78	1,770,166.36	66,756,652.95
1883..	32,481,642.38	374,129.23	4,727,143.22	6,906,083.80	1,858,107.42	46,347,106.05
1884..	29,079,596.33	263,117.17	6,023,734.45	9,095,461.45	1,864,769.26	46,326,678.66
1885..	31,584,436.64	325,210.97	11,221,846.45	7,893,217.77	1,869,363.26	52,894,075.09
1886..	32,456,493.64	393,545.28	4,317,068.27	5,673,565.04	2,069,077.00	44,909,749.23
1887..	32,973,027.41	516,984.63	22,571,328.70	9,896,512.28	2,265,219.85	68,223,072.87
1888..	32,406,306.59	492,512.60	21,741,042.44	14,596,885.03	2,988,750.90	72,225,497.56
1889..	31,440,778.93	585,066.87	2,136,516.66	4,447,475.99	3,526,597.31	42,136,435.76
1890..	30,474,900.25	655,474.96	2,691,932.29	5,298,773.93	3,542,013.83	42,663,095.26
1891..	31,555,116.85	583,847.16	4,054,822.86	8,256,303.80	4,035,710.15	48,485,800.82
1892..	31,961,546.11	557,967.86	10,935,154.69	14,040,187.70	3,636,603.68	61,131,460.04
1893..	33,286,167.94	792,470.43	2,247,730.78	6,293,296.33	3,830,176.02	46,449,841.50
1894..	38,696,951.40	2,093,615.46	15,614,118.19	12,386,406.81	3,118,421.45	71,909,513.31
1895..	44,371,949.83	1,188,258.21	14,108,435.74	2,278,614.07	3,213,809.43	65,161,067.28
1896..	53,910,957.02	1,670,005.53	6,572,390.14	3,227,409.06	3,388,622.06	68,769,383.81
Total.	850,179,670.33	48,212,687.80	211,259,153.25	244,447,791.41	51,015,956.36	1,405,115,259.15

COINAGE.

The coinage executed by the mints at Philadelphia, San Francisco, and New Orleans during the fiscal year 1896 consisted of 3,584,760 pieces of gold, of the value of $58,878,490; of 20,424,529 pieces of silver, of the nominal or face value of $11,440,641.20, and the minor coinage aggregated 54,321,484 pieces, of the nominal value of $869,337.32.

The execution of the minor coinage is confined by law to the mint at Philadelphia.

The denominations, number of pieces, and value of domestic coinage executed are shown by the following table:

COINAGE OF THE UNITED STATES, FISCAL YEAR 1896.

Denomination.	Pieces.	Value.
Gold:		
Double eagles	2,593,723	$51,874,460.00
Eagles	415,749	4,157,490.00
Half eagles	563,328	2,816,640.00
Quarter eagles	11,960	29,900.00
Total gold	3,584,760	58,878,490.00
Silver:		
Standard dollars	7,500,822	7,500,822.00
Subsidiary:		
Half dollars	3,610,063	1,805,031.50
Quarter dollars	8,022,822	2,005,705.50
Dimes	1,290,822	129,082.20
Total subsidiary	12,923,707	3,939,819.20
Total silver	20,424,529	11,440,641.20
Minor:		
Five-cent nickels	8,153,062	407,653.10
One-cent bronze	46,168,422	461,684.22
Total minor	54,321,484	869,337.32
Total coinage	78,330,773	71,188,468.52

The 7,500,822 standard silver dollars embraced in the above table were coined from the balance of the silver bullion on hand, purchased under the act of July 14, 1890, and contain 5,801,417 ounces of pure silver, costing $5,173,085.04. The seignorage on this coinage was $2,327,736.96, which sum has been deposited in the Treasury.

Of the subsidiary silver coinage during the year $3,607,120.50 was from bullion resulting from the melting of worn and uncurrent silver coins transferred from the Treasury for recoinage, and $332,698.70 from silver bullion acquired under section 3526 of the Revised Statutes of the United States.

In addition to the above, the mint at Philadelphia coined 500,000 twenty-cent pieces, of the value of $100,000, for the Government of Ecuador, completing the coinage of 5,000,000 twenty-cent pieces undertaken for that Government, under the act of January 29, 1874, authorizing

coinage to be executed at the mints of the United States for foreign countries.

The Government of Ecuador furnished the silver bullion and paid all the expenses incurred in the execution of this coinage.

The number of domestic coins manufactured by the mints of the United States during the fiscal years 1895 and 1896, and the increase or decrease during the last-named year, is exhibited in the following table:

COINAGE OF THE MINTS OF THE UNITED STATES DURING THE FISCAL YEARS 1895 AND 1896, AND THE INCREASE OR DECREASE OF THE SAME DURING THE LATTER YEAR.

Classification of coinage.	Fiscal year.		Increase, 1896.	Decrease, 1896.
	1895.	1896.		
	Pieces.	*Pieces.*	*Pieces.*	*Pieces.*
Gold coins	4,035,205	3,584,760	.....	450,445
Silver dollars	3,956,011	7,500,822	3,544,811	.....
Subsidiary silver coins	16,532,594	12,923,707	.....	3,608,887
Minor coins	35,087,302	54,321,484	19,234,182	.....
Total	59,611,112	78,330,773	22,778,993	4,059,332

The value of the domestic coinage executed by the mints of the United States during the fiscal years 1895 and 1896, and the increase or decrease of the same during 1896, is exhibited in the following table:

COINAGE OF THE MINTS OF THE UNITED STATES DURING THE FISCAL YEARS 1895 AND 1896, AND THE INCREASE OR DECREASE OF THE SAME DURING THE LATTER YEAR.

Classification of coinage.	Fiscal year.		Increase, 1896.	Decrease, 1896.
	1895.	1896.		
Gold coins	$43,933,475.00	$58,878,490.00	$14,945,015.00	.....
Silver dollars	3,956,011.00	7,500,822.00	3,544,811.00	.....
Subsidiary silver coins	5,113,469.60	3,939,819.20	.....	$1,173,650.40
Minor coins	712,594.02	869,337.32	156,743.30	.....
Total	53,715,549.62	71,188,468.52	18,646,569.30	1,173,650.40

From August 13, 1890, to June 30, 1896, the number of silver dollars coined from silver bullion purchased under the provisions of the act of July 14, 1890, aggregated 47,544,776 pieces, containing 36,772,912.70 ounces of fine silver, costing $36,964,557.38, giving a profit or seigniorage of $10,580,218.62.

The number of silver dollars coined from July 1 to November 1, 1896, was 8,762,100, consuming 6,776,936.72 ounces of pure silver, showing a profit of $2,723,816.31. All profits on the coinage of silver are regularly deposited in the Treasury at the close of each month.

The total number of silver dollars coined under the act of July 14, 1890, to November 1, 1896, was 56,306,876.

The total number of silver dollars coined from March 1, 1878, to November 1, 1896, under the acts of February 28, 1878, July 14, 1890, and March 3, 1891, is shown in the following table:

Coinage under act of—	Amount.
February 28, 1878	$378,166,793
July 14, 1890	56,306,876
March 3, 1891 (recoinage of trade dollars)	5,078,472
Total	439,552,141

Tables will be found in the Appendix (XIII and XIV, pp. 192–191) to this report, showing the denominations and values of all domestic coins manufactured by each mint during the fiscal year 1896 and during the calendar year 1895, and also tables (XLVI, XLVII, and XLVIII, pp. 255–258) showing the coinage, by denominations, for each calendar year, as well as the total coinage of each metal from the establishment of the Mint, 1792, to June 30, 1896.

BARS OF GOLD AND SILVER MANUFACTURED, 1896.

In addition to the coinage executed during the fiscal year 1896 there were manufactured gold and silver bars of the value of $60,618,978.68, as shown in the following table:

Description.	Standard ounces.	Value.
Gold	2,862,108.156	$53,248,523.79
Silver	6,333,984.73	7,370,454.89
Total		60,618,978.68

In the Appendix (VII and VIII, p. 184) will be found tables showing in detail the manufacture of bars by institutions during the fiscal year 1896.

WORK OF GOVERNMENT REFINERIES.

There were received and operated upon by the refineries of the coinage mints and the assay office at New York, during the fiscal year 1896 1,334,145.901 standard ounces of gold and 4,533,513.52 standard ounces of silver, of the value of $30,096,657.30, as shown by the following table:

BULLION OPERATED UPON IN THE GOVERNMENT REFINERIES, 1896.

Institutions.	Gold.		Silver.		Total value.
	Standard ounces.	Value.	Standard ounces.	Value.	
Philadelphia	496,314.342	$9,233,749.00	1,117,567.34	$1,300,441.99	$10,534,190.99
San Francisco	268,456.019	4,994,530.58	138,434.46	161,087.36	5,155,617.94
New Orleans	10,375.090	193,024.93	2,726.43	3,172.57	196,197.50
New York	558,999.550	10,399,991.63	3,274,785.29	3,810,659.24	14,210,650.87
Total	1,334,145.001	24,821,296.14	4,533,513.52	5,275,361.16	30,096,657.30

PURCHASE OF SILVER.

The purchase of silver by the Government since November 1, 1893, the date of the repeal of the purchasing clause of the act of July 14, 1890, has been restricted to the silver contained in gold deposits, the amount received in payment of charges on silver deposits, surplus silver bullion returned by the operative officers of the coinage mints on the annual settlement of their accounts at the close of each fiscal year, and uncurrent and mutilated domestic silver coin purchased for the subsidiary silver coinage under the provisions of section 3526, Revised Statutes of the United States.

The amount and cost of silver purchased for the subsidiary silver coinage during the fiscal year ended June 30, 1896, and from July 1 to November 1, 1896, are set forth in the following tables:

SILVER PURCHASED FOR SUBSIDIARY COINAGE DURING THE FISCAL YEAR 1896.

Stock.	Fine ounces.	Cost.
Partings, charges, and fractions purchased	177,190.09	$117,259.86
Mutilated coins, including melted assay coins, purchased	2,265.42	1,782.19
Surplus bullion purchased	5,122.63	3,387.57
Total	184,578.14	122,429.62

SILVER PURCHASED FOR SUBSIDIARY COINAGE FROM JULY 1, 1896, TO NOVEMBER 1, 1896.

Stock.	Fine ounces.	Cost.
Partings, charges, and fractions purchased	61,534.00	$41,022.65
Mutilated coins, including melted assay coins, purchased	517.22	445.48
Surplus bullion purchased	3.06	2.04
Total	62,054.28	41,470.17

QUANTITY AND COST OF SILVER PURCHASED FOR SUBSIDIARY COINAGE, BY MINTS, DURING THE FISCAL YEAR 1896.

Mints.	Fine ounces.	Cost.
Philadelphia	133,318.93	$88,287.20
San Francisco	46,102.65	30,705.08
New Orleans	3,858.35	2,572.23
Carson	1,298.21	865.11
Total	184,578.14	122,429.62

QUANTITY AND COST OF SILVER PURCHASED FOR SUBSIDIARY COINAGE, BY MINTS, FROM JULY 1 TO NOVEMBER 1, 1896.

Mints.	Fine ounces.	Cost.
Philadelphia	41,260.75	$27,607.84
San Francisco	18,156.53	12,104.35
New Orleans	1,972.57	1,315.01
Carson	664.43	442.97
Total	62,054.28	41,470.17

STATEMENT SHOWING THE AMOUNT AND COST OF SILVER BULLION PURCHASED UNDER THE ACT OF JULY 14, 1890, AND USED IN THE COINAGE OF STANDARD SILVER DOLLARS, WASTED AND SOLD IN SWEEPS, NUMBER OF DOLLARS COINED, AND SEIGNIORAGE ON THE SAME, FROM AUGUST 13, 1890, TO JULY 1, 1896.

Disposition.	Fine ounces.	Cost.
Total amount purchased and cost	168,674,682.53	$155,931,002.25
Used in coinage to July 1, 1896	36,772,912.70	36,964,557.38
Wasted and sold in sweeps	63,570.37	62,535.64
Total amount used	36,836,483.07	37,027,093.02
Balance on hand July 1, 1896	131,838,199.46	118,903,909.23
Total	168,674,682.53	155,931,002.25
Silver dollars coined		47,544,776.00
Seigniorage on same		10,580,218.62

STATEMENT SHOWING THE AMOUNT AND COST OF SILVER BULLION PURCHASED UNDER THE ACT OF JULY 14, 1890, AND USED IN THE COINAGE OF STANDARD SILVER DOLLARS, WASTED AND SOLD IN SWEEPS, NUMBER OF DOLLARS COINED, AND SEIGNIORAGE ON THE SAME, FROM AUGUST 13, 1890, TO NOVEMBER 1, 1896

Disposition.	Fine ounces.	Cost.
Total amount purchased and cost	168,674,682.53	$155,931,002.25
Used in coinage to November 1, 1896	43,549,849.42	43,002,841.07
Wasted and sold in sweeps	63,570.37	62,535.64
Total amount used	43,613,419.79	43,065,376.71
Balance on hand November 1, 1896	125,061,262.74	112,865,625.54
Total	168,674,682.53	155,931,002.25
Silver dollars coined		56,306,876.00
Seigniorage on same		13,304,034.93

STATEMENT, BY FISCAL YEARS, OF THE AMOUNT AND COST OF SILVER PURCHASED UNDER THE ACT OF JULY 14, 1890, FROM AUGUST 13, 1890, TO NOVEMBER 1, 1893, DATE OF REPEAL.

Fiscal year.	Amount purchased.	Cost.
	Fine ounces.	
1891	48,393,113.05	$50,577,498.44
1892	54,355,748.10	51,106,607.96
1893	54,008,162.60	45,531,374.53
From July 1, 1893, to November 1, 1893	11,917,658.78	8,715,521.32
Total	168,674,682.53	155,931,002.25

The following tables exhibit the amount and cost of silver bullion purchased each year under the acts of February 28, 1878, and July 14, 1890, the average price paid, and the bullion value of the standard silver dollar:

AMOUNT, COST, AVERAGE PRICE, AND BULLION VALUE OF THE SILVER DOLLAR OF SILVER PURCHASED UNDER THE ACT OF FEBRUARY 28, 1878.

Fiscal year.	Fine ounces.	Cost.	Average price per fine ounce.	Bullion value of a silver dollar.
1878	10,809,350.58	$13,023,208.96	$1.2048	$0.9318
1879	19,248,086.09	21,593,642.99	1.1218	.8676
1880	22,057,862.64	25,235,081.53	1.1440	.8848
1881	19,709,227.11	22,327,874.75	1.1328	.8761
1882	21,190,200.87	24,054,480.47	1.1351	.8779
1883	22,889,241.24	25,577,327.58	1.1174	.8642
1884	21,922,951.52	24,378,383.91	1.1120	.8600
1885	21,791,171.61	23,747,460.25	1.0897	.8428
1886	22,690,652.94	23,448,960.01	1.0334	.7992
1887	26,490,008.04	25,988,620.46	.9810	.7587
1888	25,386,125.32	24,237,553.20	.9547	.7384
1889	26,468,861.03	24,717,853.81	.9338	.7222
1890	27,820,900.05	26,899,326.33	.9668	.7477
1891	2,797,379.52	3,049,426.46	1.0901	.8431
Total	291,272,018.56	308,279,260.71	1.0583	.8185

AMOUNT, COST, AVERAGE PRICE, AND BULLION VALUE OF THE SILVER DOLLAR OF SILVER PURCHASED UNDER THE ACT OF JULY 14, 1890.

Fiscal year.	Fine ounces.	Cost.	Average price per fine ounce.	Bullion value of a silver dollar.
1891	48,393,113.05	$50,577,498.44	$1.0451	$0.8083
1892	54,355,748.10	51,106,607.96	.9402	.7271
1893	54,008,162.60	45,531,374.53	.8430	.6520
1894	11,917,658.78	8,715,521.32	.7313	.5656
Total	168,674,682.53	155,931,002.25	.9244	.7150

BALANCE OF SILVER BULLION PURCHASED UNDER THE ACT OF JULY 14, 1890, ON HAND AT EACH MINT JUNE 30, 1896.

Mint.	Fine ounces.	Cost.
Philadelphia	115,415,872.28	$104,465,766.84
San Francisco	10,058,329.57	9,006,553.53
New Orleans	5,796,016.14	4,976,877.91
Carson	567,981.47	454,710.95
Total	131,838,199.46	118,903,909.23

BALANCE OF SILVER BULLION PURCHASED UNDER THE ACT OF JULY 14, 1890, ON HAND AT EACH MINT NOVEMBER 1, 1896.

Mint.	Fine ounces.	Cost.
Philadelphia	112,351,435.56	$101,692,069.20
San Francisco	7,970,048.32	7,136,638.97
New Orleans	4,171,797.39	3,582,206.42
Carson	567,981.47	454,710.95
Total	125,061,262.74	112,865,625.54

In the Appendix (X and XI, pp. 188–190) tables will be found showing the quantity and cost of silver used in coinage of silver dollars purchased under the act of July 14, 1890, and table (XII, p. 191) showing the amount of silver purchased under the various acts.

The number of fine ounces of silver used, cost thereof, and the nominal value of the subsidiary silver coinage manufactured during the fiscal year 1896, and from July 1 to November 1, 1896, are shown in the following table:

AMOUNT, COST, AND NOMINAL VALUE OF THE SUBSIDIARY SILVER COINAGE EXECUTED DURING THE FISCAL YEAR 1896, AND THE SOURCES FROM WHICH THE BULLION WAS OBTAINED.

Sources from which bullion was obtained.	Fine ounces.	Cost.	Coinage.
Mint at Philadelphia:			
Worn and uncurrent coin	1,630,388.12	$2,253,862.95	$2,214,669.00
Partings, charges, and fractions purchased	130,447.82	86,098.39	
Melted assay coins purchased	400.80	539.12	217,698.70
Mutilated coins purchased	1,027.44	684.95	
Surplus bullion purchased	1,442.87	964.74	
Total	1,763,707.05	2,342,150.15	2,432,367.70
Mint at San Francisco:			
Worn and uncurrent coin	507,538.72	701,626.00	212,451.50
Partings, charges, and fractions purchased	42,317.47	28,211.61	
Melted assay coins purchased			115,000.00
Mutilated coins purchased	130.23	86.82	
Surplus bullion purchased	3,654.95	2,406.65	
Total	553,641.37	732,331.08	327,451.50
Mint at New Orleans:			
Worn and uncurrent coin	1,240,815.98	1,715,314.99	1,180,000.00
Partings, charges, and fractions purchased	3,151.40	2,100.93	
Melted assay coins purchased			
Mutilated coins purchased	706.95	471.30	
Surplus bullion purchased			
Total	1,244,674.33	1,717,887.22	1,180,000.00
Mint at Carson:			
Worn and uncurrent coin			
Partings, charges, and fractions purchased	1,273.40	848.93	
Melted assay coins purchased			
Mutilated coins purchased			
Surplus bullion purchased	24.81	16.18	
Total	1,298.21	865.11	
Summary:			
Worn and uncurrent coin	3,378,742.82	4,670,803.94	3,607,120.50
Partings, charges, and fractions purchased	177,190.09	117,259.86	
Melted assay coins purchased	400.80	539.12	332,698.70
Mutilated coins purchased	1,864.62	1,243.07	
Surplus bullion purchased	5,122.63	3,387.57	
Total	3,563,320.96	4,793,233.56	3,939,819.20

AMOUNT, COST, AND NOMINAL VALUE OF THE SUBSIDIARY SILVER COINAGE EXECUTED FROM JULY 1, 1896, TO NOVEMBER 1, 1896, AND SOURCES FROM WHICH THE BULLION WAS OBTAINED.

Sources from which bullion was obtained.	Fine ounces.	Cost.	Coinage.
Mint at Philadelphia:			
Worn and uncurrent coin	430,806.22	$595,550.33	$299,000.00
Partings, charges, and fractions purchased	40,782.14	27,183.10	
Melted assay coins purchased	156.63	205.08	85.00
Mutilated coins purchased	321.98	214.66	
Surplus bullion purchased			
Total	472,066.97	623,158.17	299,085.00
Mint at San Francisco:			
Worn and uncurrent coin			160,009.75
Partings, charges, and fractions purchased	18,156.53	12,104.35	
Melted assay coins purchased			
Mutilated coins purchased			
Surplus bullion purchased			
Total	18,156.53	12,104.35	160,009.75
Mint at New Orleans:			
Worn and uncurrent coin	280,448.37	387,694.30	155,000.00
Partings, charges, and fractions purchased	1,933.96	1,289.27	
Melted assay coins purchased			
Mutilated coins purchased	38.61	25.74	
Surplus bullion purchased			
Total	282,420.94	389,009.31	155,000.00
Mint at Carson:			
Worn and uncurrent coin			
Partings, charges, and fractions purchased	661.37	440.93	
Melted assay coins purchased			
Mutilated coins purchased			
Surplus bullion purchased	3.06	2.04	
Total	664.43	442.97	
Summary:			
Worn and uncurrent coin	711,254.59	983,244.63	614,009.75
Partings, charges, and fractions purchased	61,534.00	41,022.65	
Melted assay coins purchased	156.63	205.08	85.00
Mutilated coins purchased	360.59	240.40	
Surplus bullion purchased	3.06	2.04	
Total	773,308.87	1,024,714.80	614,094.75

The following table shows the balance and cost of silver on hand July 1, 1895, available for the manufacture of subsidiary silver coin, the amount acquired through purchase and transfer, the amount used in such coinage and sold in sweeps during the year, and the balance on hand June 30, 1896, and also from July 1 to November 1, 1896:

SILVER FOR SUBSIDIARY COINAGE, FISCAL YEAR 1896.

Stock.	Mint at Philadelphia.		Mint at San Francisco.	
	Fine ounces.	Cost.	Fine ounces.	Cost.
Silver bullion on hand July 1, 1895	599,452.51	$738,228.63	65,720.58	$40,379.21
Uncurrent coins transferred from Treasury	1,630,388.12	2,253,862.95	507 538.72	701,626.00
Partings, charges, and fractions purchased	130,447.82	86,098.39	42,317.47	28,211.61
Melted assay coins purchased	400.80	539.12		
Mutilated coins purchased	1,027.44	684.95	130.23	86.82
Surplus bullion purchased	1,442.87	964.74	3,654.95	2,406.65
Total	2,363,159.56	3,080,378.78	619,361.95	772,710.29
Used in coinage, fiscal year 1896	1,759,513.99	2,319,722.49	236,870.23	264,777.19
Transferred				
Sold in sweeps	4,342.73	2,900.93	2,191.90	1,346.72
Wasted by operative officers	1,912.18	1,278.53	477.90	314.68
Balance on hand June 30, 1896	597,390.66	756,476.83	379,821.92	506,271.70
Total	2,363,159.56	3,080,378.78	619,361.95	772,710.29

Stock.	Mint at New Orleans.		Mint at Carson.		Total.	
	Fine ounces.	Cost.	Fine ounces.	Cost.	Fine ounces.	Cost.
Silver bullion on hand July 1, 1895	598.10	$527.53	3,025.22	$1.795.11	668,796.41	$780,930.48
Uncurrent coins transferred from Treasury	1,240,815.98	1,715,314.99			3,378,742.82	4,670,803.94
Partings, charges, and fractions purchased	3,151.40	2,100.93	1,273.40	848.93	177,190.09	117,259.86
Melted assay coins purchased					400.80	539.12
Mutilated coins purchased	706.95	471.30			1,864.62	1,243.07
Surplus bullion purchased			24.81	16.18	5,122.63	3,387.57
Total	1,245,272.43	1,718,414.75	4,323.43	2,660.22	4,232,117.37	5,574,164 04
Used in coinage, fiscal year 1896	853,582.50	1,180,000.00			2,849,966.72	3,764,499.68
Transferred	207,207.54	286,445.54	69.17	55.38	207,276.71	286,500.92
Sold in sweeps	2,336.61	1,532.87			8,871.24	5,780.52
Wasted by operative officers	1,904.16	1,268.76			4,294.24	2,861.97
Balance on hand June 30, 1896	180,241.62	249,167.58	4,254.26	2,604.84	1,161,708.46	1,514,520.95
Total	1,245,272.43	1,718,414.75	4,323.43	2,660.22	4,232,117.37	5,574,164.04

SILVER FOR SUBSIDIARY COINAGE FROM JULY 1, 1896, TO NOVEMBER 1, 1896.

Stock.	Mint at Philadelphia.		Mint at San Francisco.	
	Fine ounces.	Cost.	Fine ounces.	Cost.
Silver bullion on hand July 1, 1896	597,390.66	$756,476.83	379,821.92	$506,271.70
Uncurrent coins transferred from Treasury	430,806.22	595,550.33		
Partings, charges, and fractions purchased	40,782.14	27,188.10	18,156.53	12,104.35
Melted assay coins purchased	156.63	205.08		
Mutilated coins purchased	321.98	214.66		
Surplus bullion purchased				
Total	1,069,457.63	1,379,635.00	397,978.45	518,376.05
Used in coinage July 1, to Nov. 1, 1896	216,350.61	299,041.13	115,747.05	160,009.75
Transferred				
Sold in sweeps			1,794.34	1,181.51
Balance on hand Nov. 1, 1896	853,107.02	1,080,593.87	280,437.06	357,184.79
Total	1,069,457.63	1,379,635.00	397,978.45	518,376.05

Stock.	Mint at New Orleans.		Mint at Carson.		Total.	
	Fine ounces.	Cost.	Fine ounces.	Cost.	Fine ounces.	Cost.
Silver bullion on hand July 1, 1896	180,241.62	$249,167.58	4,254.26	$2,604.84	1,161,708.46	$1,514,520.95
Uncurrent coins transferred from Treasury	280,448.37	387,694.30			711,254.59	983,244.63
Partings, charges, and fractions purchased	1,933.96	1,289.27	661.37	440.93	61,534.00	41,022.65
Melted assay coins purchased					156.63	205.08
Mutilated coins purchased	38.61	25.74			360.59	240.40
Surplus bullion purchased			3.06	2.04	3.06	2.04
Total	462,662.56	638,176.89	4,918.69	3,047.81	1,935,017.33	2,539,235.75
Used in coinage July 1 to Nov. 1, 1896	112,123.12	155,000.00			444,220.78	614,050.88
Transferred						
Sold in sweeps	1,704.54	1,136.35			3,498.88	2,317.86
Balance on hand Nov. 1, 1896	348,834.90	482,040.54	4,918.69	3,047.81	1,487,297.67	1,922,867.01
Total	462,662.56	638,176.89	4,918.69	3,047.81	1,935,017.33	2,539,235.75

COURSE OF SILVER.

The fluctuations in the price of silver in the London market during the year ended June 30, 1896, were not so great as for the preceding twelve months. The price ranged from 30 pence to 31 15/16 pence per ounce for silver .925 fine (British standard), equivalent at the former to $0.65763 and at the last-named rate to $0.70010 in United States money

per ounce 1,000 fine, a variation of $0.04247 per ounce. The London quotation July 1, 1895, was 30½ pence per ounce, equivalent at par of exchange ($4.8665) to $0.66855 per ounce fine. The closing price of the year, June 30, 1896, was 31½ pence per ounce, equivalent to $0.69051 per ounce fine.

The average London price for the year was 30.832 pence, equivalent to $0.67588 per fine ounce.

The commercial value of silver to gold at the average price for the year was 1 to 30.58. The bullion value of a silver dollar at the average price was $0.52262. The number of grains of pure silver purchasable with a dollar at the average price was 710.06, equal to 1.479 ounces fine.

In the Appendix will be found a table showing the ratio of silver to gold since 1687, and a table showing the gold value of an ounce of fine silver and the ratio between gold and silver since 1879.

The following table exhibits the value of the pure silver in a silver dollar at prices of silver per ounce fine from $0.50 to $1.2929, or parity:

Price of silver per fine ounce.	Value of pure silver in a silver dollar.	Price of silver per fine ounce.	Value of pure silver in a silver dollar.	Price of silver per fine ounce.	Value of pure silver in a silver dollar.
$0.50	$0.387	$0.77	$0.596	$1.04	$0.804
.51	.394	.78	.603	1.05	.812
.52	.402	.79	.611	1.06	.820
.53	.410	.80	.619	1.07	.828
.54	.418	.81	.626	1.08	.835
.55	.425	.82	.634	1.09	.843
.56	.433	.83	.642	1.10	.851
.57	.441	.84	.650	1.11	.859
.58	.449	.85	.657	1.12	.866
.59	.456	.86	.665	1.13	.874
.60	.464	.87	.673	1.14	.882
.61	.472	.88	.681	1.15	.889
.62	.480	.89	.688	1.16	.897
.63	.487	.90	.696	1.17	.905
.64	.495	.91	.704	1.18	.913
.65	.503	.92	.712	1.19	.920
.66	.510	.93	.719	1.20	.928
.67	.518	.94	.727	1.21	.936
.68	.526	.95	.735	1.22	.944
.69	.534	.96	.742	1.23	.951
.70	.541	.97	.750	1.24	.959
.71	.549	.98	.758	1.25	.967
.72	.557	.99	.766	1.26	.975
.73	.565	1.00	.773	1.27	.982
.74	.572	1.01	.781	1.28	.990
.75	.580	1.02	.789	1.29	.998
.76	.588	1.03	.797	*a* 1.2929	1.00

a Parity.

HIGHEST, LOWEST, AND AVERAGE PRICE OF SILVER BULLION AND VALUE OF A FINE OUNCE EACH MONTH DURING THE FISCAL YEAR 1896.

Month.	Highest.	Lowest.	Average price per ounce, British standard, 0.925.	Equivalent value of a fine ounce with exchange at par, $4.8665.	Average monthly price at New York of exchange on London.	Equivalent value of a fine ounce, based on average monthly price and average rate of exchange.	Average monthly New York price of fine bar silver.
1895.	*Pence.*	*Pence.*	*Pence.*				
July	30 5/8	30 3/16	30.439	$0.66727	$4.9000	$0.67187	$0.67384
August	30 1/2	30 1/4	30.393	.66625	4.9027	.67122	.67388
September	30 9/16	30 7/16	30.489	.66836	4.8955	.67234	.67848
October	31 3/8	30 5/8	30.928	.67798	4.8811	.68010	.68712
November	31	30 5/8	30.789	.67493	4.8920	.68592	.68546
December	30 11/16	30	30.395	.66631	4.8912	.66963	.67675
1896.							
January	30 7/8	30 1/2	30.649	.67186	4.8905	.67518	.68173
February	31 9/16	30 3/4	30.992	.67939	4.8786	.68104	.68811
March	31 1/2	31 1/8	31.372	.68772	4.8818	.68988	.69519
April	31 3/16	30 13/16	31.060	.68087	4.8890	.68401	.69062
May	31 1/4	30 15/16	31.078	.68126	4.8885	.68851	.69046
June	31 9/16	31 3/16	31.403	.68840	4.8842	.69091	.69730
Average			30.832	.67588	4.8896	.68005	.68491

HIGHEST, LOWEST, AND AVERAGE PRICE OF SILVER BULLION AND VALUE OF A FINE OUNCE EACH MONTH DURING THE CALENDAR YEAR 1895.

Month.	Highest.	Lowest.	Average price per ounce, British standard, 0.925.	Equivalent value of a fine ounce with exchange at par ($4.8665).	Average monthly price at New York of exchange on London.	Equivalent value of a fine ounce based on average monthly price and average rate of exchange.	Average monthly New York price of fine bar silver.
1895.	*Pence.*	*Pence.*	*Pence.*				
January	27 7/16	27 3/16	27.331	$0.59914	$4.8897	$0.60190	$0.60726
February	27 11/16	27 1/4	27.440	.60152	4.8852	.60444	.60910
March	29 3/4	27 5/8	28.337	.62119	4.8949	.62447	.63125
April	30 7/8	29 7/8	30.415	.66674	4.8946	.67059	.67692
May	30 5/8	30 3/16	30.625	.67133	4.8800	.67289	.67769
June	30 11/16	30 3/16	30.460	.66771	4.8934	.67139	.67440
July	30 5/8	30 3/16	30.439	.66727	4.9000	.67187	.67384
August	30 1/2	30 1/4	30.393	.66625	4.9027	.67122	.67388
September	30 9/16	30 7/16	30.489	.66836	4.8955	.67234	.67848
October	31 3/8	30 5/8	30.928	.67798	4.8811	.68010	.68712
November	31	30 5/8	30.789	.67493	4.8920	.68592	.68546
December	30 11/16	30	30.395	.66631	4.8912	.66963	.67675
Average			29.836	.65406	4.8917	.65806	.66268

HIGHEST, LOWEST, AND AVERAGE VALUE OF A UNITED STATES SILVER DOLLAR, MEASURED BY THE MARKET PRICE OF SILVER, AND THE QUANTITY OF SILVER PURCHASABLE WITH A DOLLAR AT THE AVERAGE LONDON PRICE OF SILVER, EACH YEAR SINCE 1873.

Calendar year.	Bullion value of a silver dollar.			Grains of pure silver at average price purchasable with a United States silver dollar.[a]
	Highest.	Lowest.	Average.	
1873	$1.016	$0.981	$1.004	369.77
1874	1.008	.970	.988	375.76
1875	.977	.941	.964	385.11
1876	.991	.792	.894	415.27
1877	.987	.902	.929	399.62
1878	.936	.839	.891	416.66
1879	.911	.828	.868	427.70
1880	.896	.875	.886	419.49
1881	.896	.862	.881	421.87
1882	.887	.847	.878	422.83
1883	.868	.847	.858	432.69
1884	.871	.839	.861	431.18
1885	.847	.794	.823	451.09
1886	.797	.712	.769	482.77
1887	.799	.733	.758	489.78
1888	.755	.706	.727	510.66
1889	.752	.746	.724	512.93
1890	.926	.740	.810	458.83
1891	.827	.738	.764	485.76
1892	.742	.642	.674	550.79
1893	.655	.513	.604	615.10
1894	.538	.457	.491	756.04
1895	.532	.461	.505	733.87

[a] 371.25 grains of pure silver are contained in a silver dollar.

A table in the Appendix (XXX, p. 220) will be found showing the highest, lowest, and average price of silver each year since 1833.

EXPORTS OF SILVER TO THE EAST.

The exports of silver from London to India, China, and the Straits, since 1881, have been as follows:

Year.	India.	China.	Straits.	Total.
1881	$12,375,612	$3,898,860	$3,577,729	$19,852,201
1882	18,604,945	1,584,318	7,354,255	27,543,518
1883	18,040,140	4,212,574	11,189,631	33,442,345
1884	26,073,909	5,018,714	8,136,097	39,228,720
1885	30,913,667	3,160,315	3,108,146	37,182,128
1886	21,159,591	1,769,425	2,892,064	25,821,080
1887	19,798,328	1,427,179	2,766,946	23,992,453
1888	21,162,116	1,153,002	3,219,321	25,534,439
1889	28,392,786	2,731,861	8,181,141	39,305,788
1890	35,673,177	1,284,498	4,441,197	41,398,872
1891	21,717,992	1,177,620	10,754,800	33,650,412
1892	35,180,897	719,668	18,622,825	54,523,390
1893	34,319,877	11,635,650	7,847,295	53,802,822
1894	24,391,351	13,279,564	6,002,565	43,673,480
1895	17,638,610	8,042,003	3,668,772	29,349,385
1896, first 9 months	15,227,658	2,795,381	2,655,581	20,678,620

NET IMPORTS OF SILVER INTO INDIA, AVERAGE RATE OF INDIAN RUPEE, AND AMOUNT OF COUNCIL BILLS SOLD FOR FISCAL YEARS (ENDING MARCH 31) FROM 1836 TO 1896, INCLUSIVE.

Years.	Net imports of silver.	Average rate of Indian rupee.	Amount of council bills sold.	Years.	Net imports of silver.	Average rate of Indian rupee.	Amount of council bills sold.
		Pence.				*Pence.*	
1835-36....	*a* 16,118,960	.....	$9,953,224	1866-67 *b*	$32,474,026	23	$24,661,422
1836-37....	$6,176,311	22⅞	9,938,522	1867-68.....	26,230,510	23⅛	20,134,097
1837-38....	9,173,294	23	8,303,149	1868-69.....	40,330,842	23⅛	18,033,989
1838-39....	12,671,392	23⅝	11,419,685	1869-70.....	34,500,818	23½	33,968,764
1839-40....	7,864,683	23⅛	7,005,448	1870-71.....	4,273,507	22⅞	41,090,337
1840-41....	6,679,118	23½	5,715,461	1871-72.....	30,574,254	23⅛	50,175,265
1841-42....	5,887,052	22⅝	12,600,746	1872-73.....	3,298,985	22¾	67,834,606
1842-43....	14,068,739	23⅛	5,827,332	1873-74.....	11,311,401	22.351	61,654,752
1843-44....	17,237,334	23	13,634,624	1874-75.....	20,916,698	22.221	52,760,715
1844-45....	8,719,684	21⅝	12,248,742	1875-76.....	6,826,414	21.645	60,294,052
1845-46....	4,112,529	21¾	14,919,273	1876-77.....	29,911,149	20.491	61,784,106
1846-47....	6,322,979	22⅝	15,071,750	1877-78.....	61,869,640	20.79	49,319,325
1847-48....	2,204,565	22	7,503,189	1878-79.....	15,910,390	19.761	67,880,692
1848-49....	1,344,618	21⅛	9,193,767	1879-80.....	31,852,848	19.961	74,271,598
1849-50....	5,810,633	22⅛	14,283,752	1880-81.....	15,751,280	19.956	74,163,888
1850-51....	10,410,803	24¼	15,750,223	1881-82.....	21,699,764	19.895	89,604,086
1851-52....	14,016,886	24⅛	13,516,816	1882-83.....	29,614,971	19.525	73,584,015
1852-53....	22.293.629	23⅞	16,152,235	1883-84.....	25,372,923	19.536	85,649,451
1853-54....	11,279,345	24⅛	18,738,775	1884-85.....	28,367,364	19.308	66,957,731
1854-55....	138,797	23⅛	17,860,191	1885-86.....	42,960,530	18.254	50,089,386
1855-56....	40,085,623	24⅛	7,222,081	1886-87.....	25,306,454	17.441	59,061,202
1856-57....	56,413,954	25⅛	13,722,119	1887-88.....	31,623,459	16.899	74,742,515
1857-58....	61,012,039	24⅝	3,059,077	1888-89.....	30,709,917	16.379	69,410,203
1858-59....	*a* 77,283,420	(*c*)	124,451	1889-90.....	36,741,437	16.566	75,306,635
1859-60....	*a* 111,475,630	(*c*)	22,843	1890-91.....	51,993,287	18.089	77,713,304
1860-61....	*a* 53,280,090	(*c*)	3,879	1891-92.....	30,611,949	16.733	78,320,740
1861-62....	43,988,930	23⅞	5,809,277	1892-93.....	39,083,615	14.984	80,454,024
1862-63....	60,757,238	23⅞	32,321,230	1893-94.....	40,466,665	14.546	46,378,884
1863-64....	61,950,883	23⅞	43,698,839	1894-95.....	16,812,318	13.100	82,268,679
1864-65....	48,793,010	23⅞	33,040,970	1895-96.....	18,206,409	13.641	85,278,507
1865-66....	89,904,731	23¾	33,900,604				

a Rupees.

b Eleven months.

c From 1858-59 to 1860-61, inclusive, the home treasury was open at all times for the sale of bills on India, at rates altered from time to time by advertisement. Consequent on the mutiny, it was necessary to refrain from drawing on India, and exchange was raised to a prohibitory rate.

DISTRIBUTION OF SILVER DOLLARS.

The number of silver dollars distributed from the mints during the fiscal year 1896 was 620,680, against 723,447 during the preceding fiscal year, showing a decrease of 102,767.

The following table shows the number of silver dollars on hand, the coinage, and the distribution from each mint during the fiscal year 1896:

Date.	Philadelphia.	San Francisco.	New Orleans.	Carson.	Total.
In mints July 1, 1895.....	50,221,267	36,749,500	9,610,000	5,168,394	101,749,161
Transferred from the Treasury.....	.....	.....	100,000	.....	100,000
Coinage fiscal year 1896...	4,500,822	1,050,000	1,950,000	.....	7,500,822
Total.....	54,722,089	37,799,500	11,660,000	5,168,394	109,349,983
In mints July 1, 1896.....	54,522,267	37,459,918	11,610,000	5,137,118	108,729,303
Distributed from mints...	199,822	339,582	50,000	31,276	620,680

CIRCULATION OF SILVER DOLLARS.

The following table exhibits the total number of silver dollars coined, the number held by the Treasury for the redemption of certificates and Treasury notes, the number held in excess of outstanding certificates, and the number in circulation on November 1 of each of the last ten years:

COINAGE, OWNERSHIP, AND CIRCULATION OF SILVER DOLLARS.

Date.	Total coinage.	In the Treasury.		In circulation.
		Held for payment of certificates outstanding.	Held in excess of certificates outstanding.	
November 1, 1886.....	244,433,386	100,306,800	82,624,431	61,502,155
November 1, 1887.....	277,110,157	160,713,957	53,461,575	62,934,625
November 1, 1888.....	309,750,890	229,783,152	20,196,288	59,771,450
November 1, 1889.....	343,638,001	277,319,944	6,219,577	60,098,480
November 1, 1890.....	380,988,466	308,206,177	7,072,725	65,709,564
November 1, 1891.....	409,475,368	321,142,642	26,197,265	62,135,461
November 1, 1892.....	416,412,835	324,552,532	30,187,848	61,672,455
November 1, 1893.....	419,332,550	325,717,232	34,889,500	58,725,818
November 1, 1894.....	421,776,408	331,143,301	34,189,437	56,443,670
November 1, 1895.....	423,289,309	342,409,504	22,525,713	58,354,092
November 1, 1896.....	439,552,141	366,463,504	14,897,835	58,190,802

SEIGNIORAGE ON SILVER COINAGE.

On July 1, 1895, the balance of profits on the coinage of silver on hand at the mints of the United States was $171,210.29.

The seigniorage on the coinage of silver during the fiscal year 1896 was, on silver dollars, $2,327,736.96, and on subsidiary pieces, $175,319.52; a total seigniorage of $2,503,056.48.

The amount reimbursed on account of silver wastage and loss on sale of sweeps, paid from this seigniorage, was $1,345.96, leaving the net seigniorage on the silver coinage during the fiscal year $2,501,710.52.

The amount deposited in the Treasury during the year was $2,198,642.83, leaving a balance of $474,277.98 on hand at the mints June 30, 1896, which has since been deposited in the Treasury.

Including the balance on hand at the mints July 1, 1878, the net seigniorage or profits on the coinage of silver from that date to June 30, 1896, aggregated $78,145,603.93.

The seigniorage on the coinage of silver dollars, under the act of July 14, 1890, from August 13, 1890 (the date the act went into effect), to June 30, 1896, was $10,580,218.62, and from July 1 to November 1, 1896, $2,723,816.31, a total seigniorage under this act of $13,304,034.93.

A table showing the seigniorage on the silver coinage during the fiscal year at each mint and the disposition of the same will be found in the Appendix (XVI, p. 198).

APPROPRIATIONS AND EXPENDITURES.

The specific appropriations for the support of the mints and assay offices of the United States contained in the act making appropriations for the legislative, executive, and judicial expenses of the Government for the fiscal year ended June 30, 1896, amounted in the aggregate to $978,900.

Owing to the increase in the number of gold deposits at the assay office at Helena, it was necessary to procure an appropriation of $350 to supply a deficiency in the appropriation for wages of workmen at that institution, making the total amount appropriated for the fiscal year $979,250.

The expenditures from the specific appropriations for the support of the mints and assay offices of the United States for the fiscal year, 1896, aggregated $979,115.87, leaving an unexpended balance of the several appropriations for salaries, wages, and contingent expenses of $134.13. The coinage of silver dollars from bullion purchased under the act of July 14, 1890, was resumed February 1, 1896, and continued during the balance of the fiscal year at the rate of $1,500,000 per month, and in addition to the amount expended from the specific appropriations, there were expended from the general appropriations contained in the act of July 14, 1890, the sum of $48,534.47. Of this sum $28,959.22 was expended at the mint at Philadelphia on account of the coinage of

silver dollars from bullion purchased under the act of July 14, 1890, and $5,058.75 on account of storage of silver bullion acquired by the same act, and the balance, $14,516.50, on account of coinage of silver dollars at the San Francisco mint.

The following table exhibits the appropriations and expenditures of the several mints and assay offices for the fiscal year 1896:

APPROPRIATIONS AND EXPENDITURES, 1896.

APPROPRIATIONS.

Institutions.	Salaries.	Wages of workmen.	Contingent expenses.	Coinage of silver bullion.	Storage of silver bullion.	Total.
MINTS.						
Philadelphia	$41,550.00	*a*$275,266.63	*a*$75,099.24	.....	.....	$391,915.87
San Francisco	41,100.00	170,000.00	35,000.00	.....	.....	246,100.00
New Orleans	31,950.00	74,000.00	33,000.00	.....	.....	138,950.00
Carson	18,100.00	15,000.00	7,500.00	.....	.....	40,600.00
Denver	12,350.00	20,000.00	5,000.00	.....	.....	37,350.00
ASSAY OFFICES.						
New York	39,250.00	27,500.00	10,000.00	.....	.....	76,750.00
Helena	7,250.00	*b*13,350.00	5,000.00	.....	.....	25,600.00
Boise	3,200.00	.....	9,000.00	.....	.....	12,200.00
Charlotte	2,750.00	.....	2,000.00	.....	.....	4,750.00
St. Louis	3,000.00	.....	2,400.00	.....	.....	5,400.00
Total	200,500.00	595,116.63	183,999.24	.....	.....	979,615.87

EXPENDITURES.

MINTS.						
Philadelphia	$41,453.86	$275,173.44	$59,770.55	$28,959.22	$5,059.65	$410,416.72
San Francisco	41,099.91	169,995.25	34,771.77	14,516.50	.....	260,383.43
New Orleans	31,238.34	67,776.90	15,412.20	.....	.....	114,427.44
Carson	15,104.04	13,580.25	5,667.43	.....	.....	34,351.72
Denver	12,350.00	20,000.00	4,557.06	.....	.....	36,907.06
ASSAY OFFICES.						
New York	39,250.00	26,896.50	9,537.86	.....	.....	75,684.36
Helena	7,250.00	13,227.00	4,969.45	.....	.....	25,446.45
Boise	3,200.00	6,817.47	2,182.53	.....	.....	12,200.00
Charlotte	2,760.00	1,080.00	919.72	.....	.....	4,749.72
St. Louis	3,000.00	1,006.50	379.37	.....	.....	4,385.87
Total	196,696.15	595,553.31	138,167.94	43,475.72	5,059.65	978,952.77

a Includes earnings of the mint during the fiscal year—$266.63 wages, $99.24 contingent expenses.
b Includes deficiency appropriation of $350.

APPROPRIATIONS AND EXPENSES OF THE OFFICE OF THE DIRECTOR OF THE MINT FOR THE FISCAL YEAR 1896.

The expenditures for the office of the Director of the Mint, including salaries, expenses incurred in collecting and compiling the statistics of the production of gold and silver, supervising the annual settlements, incidental and contingent expenses, and for the support of the assay laboratory connected with the Bureau, aggregated for the year $32,085.84, leaving an unexpended balance of $4,224.21 to the credit of the several appropriations for the office of the Director of the Mint, as shown in the following table:

Purpose for which appropriated.	Appropriated.	Expended.	Unexpended.
Salaries	$29,160.00	$26,026.71	$3,133.29
Examination of mints	2,500.00	2,165.42	334.58
Mining statistics	3,500.00	3,021.98	478.02
Laboratory	750.00	508.78	241.22
Pamphlets and incidental expenses	400.00	362.95	37.05
Total	36,310.00	32,085.84	4,224.16

The appropriations made by Congress for the support of the mints and assay offices during the fiscal year 1897 is shown in the following table:

APPROPRIATIONS FOR MINTS AND ASSAY OFFICES, 1897.

Institutions.	Salaries.	Wages of workmen.	Contingent expenses.	Total.
MINTS.				
Philadelphia	$41,550	$285,000	$65,000	$391,550
San Francisco	41,100	170,000	35,000	246,100
New Orleans	31,950	74,000	25,000	130,950
Carson	17,300	15,000	7,500	39,800
Denver	12,350	20,000	5,000	37,350
ASSAY OFFICES.				
New York	39,250	27,500	10,000	76,750
Helena	7,250	13,000	5,000	25,250
Boise	3,200	7,500	3,000	13,700
Charlotte	2,750	1,080	920	4,750
St. Louis	3,000	1,000	750	4,750
Total	199,700	614,080	157,170	970,950

ESTIMATES OF APPROPRIATIONS FOR THE FISCAL YEAR 1898.

The estimates of the appropriations that will be required for the support of the mint service, including the office of the Director of the Mint, for the fiscal year 1898, as submitted, aggregate $1,021,760, or $1,500 less than for the fiscal year ending June 30, 1897.

EARNINGS AND EXPENDITURES OF THE REFINERIES OF THE COINAGE MINTS AND OF THE ASSAY OFFICE AT NEW YORK.

The charges received for parting and refining bullion during the fiscal year 1896 aggregated $164,437.76, exclusive of the amount received from the sale of by-products, $10,522.71, which sum is deposited in the Treasury as a miscellaneous receipt.

The amount expended during the year on account of expenses incident to parting and refining bullion aggregated $140,197.79, showing the excess of charges collected over expenditures of $24,377.97.

The amount of charges collected for and the amount disbursed on account of the expenses incident to parting and refining bullion at the coinage mints and assay office at New York during the fiscal year 1896 are shown by the following table:

CHARGES COLLECTED AND EXPENDITURES FOR PARTING AND REFINING BULLION, 1896.

Institutions.	Charges collected.	Gross expenditures.	Surplus of charges collected.	Excess of expenditures over charges collected.
Mint at Philadelphia	$29,268.56	$28,496.64	$771.92	
Mint at San Francisco	23,588.80	23,726.80		$138.00
Mint at Carson	1,177.49	1,018.59	158.90	
Mint at New Orleans	1,003.70	243.30	760.40	
Assay office at New York	109,399.21	86,712.46	22,686.75	
Total	164,437.76	140,197.79	24,377.97	138.00
Net surplus of charges collected			24,239.97	

EARNINGS AND EXPENDITURES OF THE MINTS AND ASSAY OFFCES.

The total amount of gross earnings of the mints and assay offices during the fiscal year 1896 was $3,384,069.16; of this, $164,437.76 was for parting and refining bullion, $6,601.44 for copper alloy, and $10,606.10 for charges by the minor assay offices for melting, assaying, and stamping bullion.

The seigniorage during the year on the coinage of standard silver dollars was $2,327,736.96; on subsidiary silver coinage, $175,319.52; on minor coinage, $613,233.83, and on the recoinage of minor coins, $16,297.39; a total seigniorage of $3,132,587.70.

The expenditures of the mint service during the year, including wastages by the operative officers, loss on sale of sweeps, and expense of distributing minor coins, amounted to $1,163,566.78, which shows the net earnings for the year to have been $2,220,502.38.

In the Appendix (XV, p. 196) will be found a table showing in detail the earnings and expenditures of the mint service during the year.

CLASSIFIED STATEMENT OF EXPENDITURES.

The expenditures of the mints and assay offices and of the refineries for supplies, salaries, and wages of workmen during the fiscal year ended June 30, 1896, are shown in the table following.

CONSOLIDATED STATEMENT OF EXPENDITURES FOR SUPPLIES OF THE MINTS AND ASSAY OFFICES OF THE UNITED STATES DURING THE FISCAL YEAR ENDED JUNE 30, 1896.

Items of expenditure.	Ordinary expenses.	Refinery expenses.	Total.
Acids	$1,507.22	$21,614.49	$23,121.71
Advertisement for supplies	1,730.98	.....	1,730.98
Assayer's materials	1,844.64	.....	1,844.64
Assayer's balances	314.70	.....	314.70
Barrels	.....	600.34	600.34
Belting	443.74	.....	443.74
Brooms	34.38	53.78	88.16
Bullion boxes	278.00	.....	278.00
Carpets	56.56	.....	56.56
Charcoal	2,802.47	743.00	3,545.47
Chemicals	3,948.95	143.36	4,092.31
Coal	13,367.26	1,667.15	15,034.41
Coke	1,752.02	.....	1,752.02
Copper	11,224.01	6,150.56	17,374.57
Crucibles	4,564.71	3,654.56	8,219.27
Dry goods	3,150.99	667.82	3,818.81
Electric power	608.64	.....	608.64
Fire brick	580.92	232.69	813.61
Fence, new	510.35	.....	510.35
Freight and drayage	9,402.36	.....	9,402.36
Flags	34.20	.....	34.20
Fluxes	581.43	1,745.40	2,326.83
Furniture	113.10	.....	113.10
Furnaces	451.72	.....	451.72
Gas and electric light	12,781.45	1,664.51	14,445.96
Gloves and gauntlets	4,796.58	667.06	5,463.64
Hardware	993.44	.....	993.44
Hauling	.....	229.50	229.50
Iron and steel	931.79	.....	931.79
Ice	1,155.26	47.76	1,203.02
Investigation of embezzlement	1,631.99	.....	1,631.99
Lead	350.20	577.88	928.08
Loss on sale of sweeps	1,514.73	73.84	1,588.57
Labor and repairs	6,099.96	1,125.82	7,225.78
Lumber	2,601.30	261.27	2,862.57
Machinery and appliances	3,823.26	498.88	4,322.14
Metal work and castings	2,230.55	1,664.88	3,895.43
Oils	1,400.11	149.81	1,549.92
Quicksilver	.....	80.33	80.33
Refinery charges refunded	.....	638.09	638.09
Salt	193.07	288.75	481.82
Shipment of bullion	69.39	.....	69.39
Stationery, printing, and binding	1,545.56	.....	1,545.56
Soaps	63.97	6.24	70.21
Soapstone	40.50	.....	40.50
Steam	1,730.32	6,033.52	7,763.84
Sewing	2,072.12	220.00	2,292.12
Sundries	16,946.34	203.59	17,149.93
Telephone and telegraphing	670.85	.....	670.85
Tools	450.26	.....	450.26
Washing	2,352.61	.....	2,352.61
Wastage	4,426.01	362.80	4,788.81
Water	2,179.33	300.40	2,479.73

CONSOLIDATED STATEMENT OF EXPENDITURES FOR SUPPLIES OF THE MINTS AND ASSAY OFFICES OF THE UNITED STATES, ETC.—Continued.

Items of expenditure.	Ordinary expenses.	Refinery expenses.	Total.
Wood	$5,862.95	$5.15	$5,868.10
Zinc	18.00	1,819.56	1,837.56
Total	138,235.25	54,192.79	192,428.04
Salaries	196,696.15	.....	196,696.15
Wages of workmen	750,139.17	.....	750,139.17
Aggregate	1,085,070.57	54,192.79	1,139,263.36

IMPORTS AND EXPORTS OF THE PRECIOUS METALS.

GOLD.—The value of the foreign gold bullion imported into the United States during the fiscal year 1896 was $13,663,406. Of this amount, $9,303,577 came from England, $2,826,327 from Mexico, $332,644 from Colombia, $308,344 from British Columbia, $200,098 from France, $348,239 from Nova Scotia, Ontario, Quebec, etc., $303,898 from Central American States, and the remainder from various countries.

The value of foreign gold coins imported was $7,816,248; of which amount $5,184,732 came from Cuba, $1,768,543 from France, $354,037 from England, $179,667 from the Dominion of Canada, $119,000 from Germany, $72,482 from Mexico, and the remainder from South and Central America.

The value of the foreign gold ores imported for reduction was $125,812, principally from Mexico and British Columbia.

The value of the gold contained in foreign base bullion and foreign silver ore imported was $1,712,773. Of this amount, $1,046,167 came from Mexico and $666,606 from British Columbia.

The value of the domestic gold coins returned to the United States was $10,189,614. Of this amount, $4,590,061 came from the Dominion of Canada, $1,964,850 from France, $1,844,375 from England, $897,138 from the West Indies, $586,887 from South American States, $246,951 from Mexico, and the remainder from Central America.

The value of the total gold imports into the United States during the fiscal year was as follows:

GOLD IMPORTS, FISCAL YEAR 1896.

Items.		Value.
Foreign bullion		$13,663,406
Foreign coin		7,816,248
Foreign ores		125,812
Gold in foreign base bullion	$270,561	
Gold in foreign silver ores	1,442,212	
		1,712,773
Total foreign		23,318,239
United States coin		10,189,614
Total imports		33,507,853

Domestic gold bullion bearing the stamp of a United States mint or assay office, of the value of $25,844,358, was exported during the fiscal year, of which $22,280,501 went to England, $3,548,437 to Germany, and the remainder to the Dominion of Canada. Other domestic gold bullion of the value of $3,199,279 was also exported, of which $2,708,898 went to France, $395,209 to England, and $82,277 to the Dominion of Canada.

Domestic gold coin of the value of $77,789,892 was exported; of this amount $38,520,000 went to England, $25,466,575 to Germany, $5,320,740 to the Dominion of Canada, $4,562,529 to South America, $2,000,500 to France, $1,049,124 to the West Indies, $710,190 to Hawaiian Islands, $115,944 to Hongkong and Japan, and the remainder to Central America. There was also exported, from the ports of New York and Baltimore, gold contained in copper matte, of the invoiced value of $100,805, all of which went to England.

The value of the foreign gold bullion reexported to England was $546.

Foreign gold coin of the value of $5,475,065 was reexported, of which $2,824,963 went to France, $2,309,266 to Cuba, $185,136 to Venezuela, $65,179 to Mexico, and the remainder to England and Canada.

The value of the gold contained in foreign base bullion reexported to England was $2,514.

The total gold exports from the United States during the fiscal year were as follows:

GOLD EXPORTS, FISCAL YEAR 1896.

Items.		Value.
Domestic bullion (United States mint or assay office bars)		$25,844,358
Other domestic bullion		3,199,279
Domestic coin		77,789,892
Gold in copper matte		100,805
Domestic ore		6
Total domestic		106,934,340
Foreign bullion reexported	$546	
Foreign coin reexported	5,475,065	
Gold in foreign base bullion reexported	2,514	
Total foreign		5,478,125
Total gold exports		112,412,465

The value of the net gold exports for the fiscal year 1896 was $78,904,612, as against $30,117,376 for the fiscal year 1895. The net exports of United States gold coin from January 1, 1870, to November 1, 1896, were $576,494,360, as shown by the table following.

IMPORTS AND EXPORTS OF UNITED STATES GOLD COIN.

Period.	Imports.	Exports.	Period.	Imports.	Exports.
Jan. 1 to July 1, 1870		$6,384,250	Fiscal year—		
Fiscal year—			1887	$5,862,509	$3,550,770
1871		55,491,719	1888	5,181,512	3,211,399
1872		40,391,357	1889	1,403,619	4,143,939
1873		35,661,863	1890	1,949,552	3,951,736
1874		28,766,943	1891	2,824,146	67,704,900
1875		59,309,770	1892	15,432,443	42,841,963
1876		27,542,861	1893	6,074,899	101,844,087
1877		21,274,565	1894	30,790,892	64,303,840
1878	$7,325,783	6,427,251	1895	10,752,673	55,096,639
1879	3,654,859	4,120,311	1896	10,189,614	77,789,892
1880	18,207,559	1,687,973	Total	149,000,390	767,835,941
1881	7,577,422	1,741,364	July, 1896	971,604	5,967,412
1882	4,796,630	29,805,289	August, 1896	3,311,568	1,940,357
1883	8,112,265	4,802,454	September, 1896	26,690,928	30,066
1884	3,824,692	12,242,021	October, 1896 *a*	19,390,426	85,500
1885	3,352,090	2,345,809	Total	199,364,916	775,859,276
1886	1,687,231	5,400,976			

a Port of New York only.

SILVER.—There were imported during the year 6,177,754 ounces of foreign silver bullion, of the commercial value of $3,812,109, of which $3,455,044 came from Mexico, $316,610 from Honduras, and the remainder from various other countries.

During the same period the imports of foreign silver coin amounted to $8,545,746, of which $7,051,333 came from Mexico, $519,787 from Colombia, $316,167 from British Honduras, $190,669 from Nicaragua, $152,577 from Santo Domingo, and the remainder from South and Central America.

Foreign silver ores of the value of $348,391 were imported from Mexico and South America.

United States silver coins of the value of $93,057 were imported, in small amounts, from various countries.

The invoiced value of silver contained in foreign base bullion and silver lead ores imported was $14,514,712; of this amount $12,898,029 came from Mexico and the remainder from British Columbia.

There were contained in the base bullion and silver ore 78,457,672 pounds of lead, of the value of $977,186, and 5,425,571 pounds of copper, of the value of $358,874.

The table following, compiled from returns made monthly to the Bureau of the Mint by the collectors and surveyors of customs of the various ports of entry, shows the quantity and value of metals contained in ores and base bullion imported during the fiscal year ended June 30, 1896.

IMPORTS OF BASE BULLION, SILVER-LEAD ORE, COPPER MATTE, ETC., AND THE YEAR ENDED

Ports.	Base bullion.		Silver-lead ore.		Copper matte, copper regulus, and copper bullion.		Total.
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Value.
From Mexico:							
New York	(a)	$5,604,674					$5,604,674
Arizona	640,114	29,587	16,983,243	$1,573,999			1,603,586
Paso del Norte			201,628,994	3,599,539			3,599,539
Corpus Christi	3,412,089	532,656	44,116	10,406			543,062
Saluria	8,131,298	640,914	5,512,662	171,643			812,557
Pittsburg	18,750,863	1,763,694					1,763,694
San Francisco			6,119,046	754,238			754,238
Omaha			1,459,680	44,069			44,069
Galveston	605.055	51,133					51,133
Total	31,539,419	8,622,658	231,747,741	6,153,894			14,776,552
From British Columbia:							
Minnesota	1,895,058	103,255					103,255
Omaha			9,396,456	435,155			435,155
Montana and Idaho			4,333,130	189,637			189,637
Kansas City			1,520,633	54,817	1,856,235	$213,528	268,345
Puget Sound	4,572,733	238,465	48,534,887	1,552,136			1,790,601
Total	6,467,791	341,720	63,785,106	2,231,745	1,856,235	213,528	2,786,993
Total imports	38,007,210	8,964,378	295,532,847	8,385,639	1,856,235	213,528	17,563,545

a Information not furnished.

RECAPITULATION OF IMPORTS

Description.	From Mexico.		From British Columbia.		Total.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Base bullion	31,539,419	$8,622,658	6,467,791	$341,720	38,007,210	$8,964,378
Silver-lead ore	231,747,741	6,153,894	63,785,106	2,231,745	295,532,847	8,385,639
Copper matte, etc			1,856,235	213,528	1,856,235	213,528
Total	263,287,160	14,776,552	72,109,132	2,786,993	335,396,292	17,563,545

PRECIOUS METALS, LEAD, AND COPPER CONTAINED THEREIN, DURING THE FISCAL JUNE 30, 1896.

Metallic contents of the importation.								Total.
Gold.		Silver.		Lead.		Copper.		
Ounces.	Value.	Ounces.	Value.	Pounds.	Value.	Pounds.	Value.	Value.
9,902	$198,030	8,191,885	$5,406,644	(a)	(a)	(a)	(a)	$5,604,674
14,300	286,033	1,973,484	1,261,239	1,890,735	$24,780	630,684	$31,534	1,603,586
16,188	343,296	4,601,253	2,951,283	28,055,996	304,960	.....	.....	3,599,539
867	18,681	453,403	310,497	982,672	24,532	2,402,679	189,352	543,062
3,315	64,922	1,266,366	684,276	7,938,862	62,878	11,806	481	812,557
21	420	2,384,460	1,604,360	18,476,353	158,914	.....	.....	1,763,694
5,988	132,271	859,983	602,934	651,644	19,033	.....	.....	754,238
.....	.....	82,590	43,856	15,370	213	.....	.....	44,069
122	2,514	73,641	32,940	603,075	14,352	16,750	1,327	51,133
50,703	1,046,167	19,887,065	12,898,029	58,615,607	609,662	3,061,919	222,694	14,776,552
6	109	68,925	45,837	1,889,313	57,309	.....	.....	103,255
.....	.....	559,657	373,453	2,924,440	61,702	.....	.....	435,155
.....	.....	210,980	142,480	2,005,162	47,157	.....	.....	189,637
98	1,967	297,335	193,952	910,133	13,064	846,728	59,362	268,345
33,223	664,530	1,281,199	860,961	12,113,017	188,292	1,516,924	76,818	1,790,601
33,327	666,606	2,418,096	1,616,683	19,842,065	367,524	2,363,652	136,180	2,786,993
84,030	1,712,773	22,305,161	14,514,712	78,457,672	977,186	5,425,571	358,874	17,563,545

AND THEIR METALLIC CONTENTS.

Description.	Metallic contents of the importation of base bullion, etc.					
	From Mexico.		From British Columbia.		Total.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
Gold.....ounces..	50,703	$1,046,167	33,327	$666,606	84,030	$1,712,773
Silver.....do....	19,887,065	12,898,029	2,418,096	1,616,683	22,305,161	14,514,712
Lead.....pounds..	58,615,607	609,662	19,842,065	367,524	78,457,672	977,186
Copper.....do....	3,061,919	222,694	2,363,652	136,180	5,425,571	358,874
Total.....	.....	14,776,552	.....	2,786,993	.....	17,563,545

The value of the total silver imports into the United States during the fiscal year was as follows:

SILVER IMPORTS, FISCAL YEAR 1896.

Items.		Value.
Foreign bullion (commercial value)		$3,812,109
Foreign coin		8,515,746
Foreign ores (commercial value)		348,391
Silver in foreign base bullion (commercial value)	$8,279,062	
Silver in foreign silver-lead ores (commercial value)	6,235,650	
		14,514,712
Total foreign		27,220,958
United States coin		93,057
Total silver imports		27,314,015

The exports of domestic silver bullion bearing the stamp of a United States mint or assay office were 1,373 ounces, of the value of $972, all of which went to Quebec. Other silver bullion containing 77,103,480 ounces, of the invoiced value of $52,123,992, was exported, of which 61,401,585 ounces, of the value of $41,578,367, went to England; 4,959,307 ounces, of the value of $3,377,126, went to France; 9,504,424 ounces, of the value of $6,333,543, to China, Hongkong, and Hawaiian Islands; 1,028,074 ounces, of the value of $694,893, to Guatemala; 149,800 ounces, of the value of $100,600, to British East Indies, and the remainder to the Dominion of Canada.

Silver coins of the United States, of the value of $288,853, were exported; of this amount $241,441 went to the Dominion of Canada, $22,000 to Haiti, $17,500 to Hawaiian Islands, and the remainder to Mexico.

Silver, of the value of $677,984, contained in copper matte, was exported to England.

Following are statements from the collectors of customs at the ports of New York and Baltimore relative to the value of gold and silver exported in copper matte:

OFFICE OF THE COLLECTOR OF CUSTOMS,
Port of New York, October 9, 1896.

SIR: In reply to your letter of the 6th instant, I would state that the records of this office, as furnished by the shippers of pig copper, copper matte, etc., from time

to time, show the amount of gold and silver contained in the several forms of copper exported from this port during the fiscal year ended June 30, 1896, to be as follows:

	Ounces.	Value.
Gold	4,955	$98,178
Silver	992,241	654,372

Very respectfully,

JAMES T. KILBRETH, *Collector.*

DIRECTOR OF THE MINT,
Washington, D. C.

OFFICE OF THE COLLECTOR OF CUSTOMS,
Port of Baltimore, Md., October 9, 1896.

SIR: In compliance with your request of the 6th instant, I have the honor to inclose herewith a statement of the amount of gold and silver contained in copper matte exported from this port during the fiscal year ended June 30, 1896. The records of this office do not indicate that there was any pig copper or other ores containing gold and silver exported during the above-mentioned period.

Respectfully, yours,

JAMES A. DIFFENBAUGH,
Special Deputy Collector.

DIRECTOR OF THE MINT, *Washington, D. C.*

ABSTRACT OF SILVER-COPPER MATTE EXPORTED FROM THE PORT OF BALTIMORE MD., DURING THE FISCAL YEAR ENDED JUNE 30, 1896.

[Calculated on a basis of 60.5 per cent pure copper, 35 ounces pure silver, and 0.14 ounces pure gold.]

	Matte.		Pure copper.	Pure silver.	Pure gold.
	Pounds.	*Tons.*	*Pounds.*	*Ounces.*	*Ounces.*
December, 1895	915,264	408.6	553,735	14,301	57.204
January, 1896	896,000	400	542,080	14,000	56
February, 1896	448,000	200	271,040	7,000	28
Total	2,259,264	1,008.6	1,366,855	35,301	141.204

There were reexported to England 17,288 ounces of foreign silver bullion, valued at $11,523.

Foreign silver coin of the value of $7,439,279 was reexported, of which $3,739,145 went to Hongkong, $1,152,946 to China, $1,114,523 to England, $452,243 to the West Indies, $372,749 to Japan, $215,391 to Mexico, $198,446 to South America, and the remainder to the Dominion of Canada and Central America.

Silver contained in foreign base bullion and ores of the value of $33,670 was reexported to England.

The total value of silver exports from the United States during the fiscal year was as follows:

SILVER EXPORTS, FISCAL YEAR 1896.

Items.		Value.
Domestic bullion, United States mint or assay office bars (commercial value)		$972
Other domestic bullion (commercial value)		52,123,992
Domestic coin		288,853
Silver in copper matte		677,984
Total domestic		53,091,801
Foreign bullion reexported	$11,523	
Foreign coin reexported	7,439,279	
Silver in foreign ore reexported	730	
Silver in foreign base bullion reexported	32,940	
Total foreign		7,484,472
Total silver exports		60,576,273

The value of the net silver exports for the fiscal year 1896 was $33,262,258, as against $27,631,789 for the fiscal year 1895.

Tables will be found in the Appendix (XXII, XXIII, XXIV, and XXV, pp. 206–216), showing the imports and exports of gold and silver bullion and coin, by countries.

MOVEMENT OF GOLD FROM THE UNITED STATES.

The table following, showing the imports and exports of gold at the port of New York during the fiscal year 1896, has been prepared by the superintendent of the United States assay office in that city.

STATEMENT OF UNITED STATES GOLD COIN AND BULLION EXPORTED FROM THE PORT OF NEW YORK DURING THE FISCAL YEAR ENDED JUNE 30, 1896.

Date.	Destination.	Value.	Rate of exchange.
1895.			
July 9	England	$50,000	$4.90
12	Germany	5,000	4.90
12	England	200,000	4.90½
16	do	70,000	4.90
17	do	80,000	4.90
18	do	1,060,000	4.90
19	Germany	12,000	4.90
23	England	124,000	4.90
24	do	130,000	4.90
26	do	35,000	4.90
26	Germany	8,000	4.90
Aug. 2	England	1,422,000	4.90½
5	do	156,000	4.90½
6	do	350,000	4.90½
7	do	1,170,200	4.90½
9	do	367,900	4.90½
12	do	1,650,000	4.90½
13	do	900,000	4.90½
14	do	1,327,000	4.90½
16	do	415,000	4.90½
16	Germany	5,000	4.90½
19	England	150,200	4.90½
20	do	2,850,000	4.90¼
21	do	100,000	4.90
23	do	1,098,500	4.90
23	Germany	8,000	4.90
26	England	600,000	4.89½
27	do	50,000	4.89¾
28	do	250,000	4.89¾
30	do	2,400,200	4.89
30	Germany	5,000	4.89
Sept. 3	England	1,150,200	4.89
4	do	1,700,000	4.90
6	do	1,754,314	4.90
6	France	58,000	4.90
9	England	1,200,000	4.90
10	do	345,000	4.90
11	do	1,100,000	4.90
13	Germany	8,000	4.90
13	England	4,571,421	4.90
16	do	1,000,000	4.89½
17	do	350,000	4.89½
18	do	250,000	4.89½
18	Germany	6,000	4.89½
20	England	150,000	4.89½
25	Germany	1,000,000	4.89
27	do	1,506,000	4.88¾
Oct. 19	do	4,000	4.88¼
Nov. 11	England	1,000,000	4.89¼
15	do	2,250,000	4.89¼
19	do	1,750,000	4.89½
1895.			
Nov. 20	England	$1,000,000	$4.89½
22	do	4,663,751	4.89½
29	do	2,989,728	4.89
Dec. 7	do	2,424,522	4.89
14	Germany	1,010,000	4.88¾
16	do	1,183,000	4.88¾
21	do	2,538,437	4.89¼
21	England	2,619,455	4.89¾
28	do	2,270,479	4.89¼
1896.			
Jan. 3	England	1,020,542	4.89¼
7	do	2,123,620	4.89¼
8	do	603,675	4.89¼
10	do	1,263,988	4.89
14	do	1,101,916	4.89¼
17	do	1,011,676	4.89¼
21	do	2,525,099	4.89
Apr. 6	Germany	800,000	4.89¼
8	do	500,000	4.89¼
13	do	700,000	4.89
20	do	200,000	4.88¾
24	France	500	4.88¾
May 1	do	1,451,691	4.88¾
4	Germany	2,150,000	4.88¾
6	do	2,200,000	4.88¾
8	France	1,507,207	4.88¾
11	England	2,050,000	4.88¾
13	Germany	1,500,575	4.88¾
15	do	1,000,000	4.88¾
16	do	1,100,000	4.88¾
20	do	500,000	4.88¾
22	France	1,000,000	4.88¾
23	Germany	100,000	4.88¾
25	do	1,550,000	4.88¾
27	do	1,250,000	4.88¾
29	do	1,100,000	4.88¾
29	do	5,780	4.88¾
29	France	704,025	4.88¾
30	Germany	600,000	4.88¾
June 3	do	500,000	4.88½
8	do	100,000	4.88½
10	do	100,000	4.88½
12	do	1,450,000	4.88½
12	France	750,000	4.88½
15	Germany	450,000	4.88½
16	do	400,000	4.88½
22	do	750,000	4.88¼
26	do	200,000	4.88¼
29	do	1,050,000	4.88¼
Total		96,271,601	

RECAPITULATION OF GOLD EXPORTS TO EUROPE.

Description.	England.	Germany.	France.
United States coin	$40,586,000	$23,217,575	$2,058,500
Gold bars (United States assay office)	22,150,192	4,331,437	3,412,923
Foreign coin	162,621	.....	2,660,563
Bullion (unknown)	509,194	5,780	.....
Total	63,408,007	27,554,792	8,131,986
Grand total	99,094,785		

During the same period there were shipped to Mexico, the West Indies, and to Central and South America the following amounts:

Description.	Value.
United States coin	$5,622,892
Foreign coin	2,561,443
Bullion	5,120
Total	8,189,455

GRAND TOTAL OF GOLD EXPORTS.

Destination.	Value.
England, France, and Germany	$99,094,785
Mexico, West Indies, and Central and South America	8,189,455
Grand total	107,284,240

The imports of gold during the same period were as follows:

Imports.	Value.
From Europe:	
United States coin	$3,809,225
Foreign coin	2,192,915
Bullion	9,357,680
Total	15,359,820
From other ports:	
United States coin	1,572,645
Foreign coin	5,353,379
Bullion	764,430
Total	7,690,454
Grand total of imports	23,050,274

STOCK OF MONEY IN THE UNITED STATES.

The stock of gold and silver coin in the United States on July 1, 1896, was $1,074,256,586; of this amount, $567,495,038 were in gold and $506,761,548 in silver.

OFFICIAL TABLE OF STOCK OF COIN IN THE UNITED STATES JULY 1, 1896.

Items.	Gold.	Silver.	Total.
Estimated stock of coin July 1, 1895	$579,400,907	$500,243,653	$1,079,644,560
Coinage, fiscal year 1896	58,878,490	11,440,641	70,319,131
Total	638,279,397	511,684,294	1,149,963,691
Loss:			
Net exports of United States coin for fiscal year 1896	67,600,278	189,184	67,789,462
United States coin melted for recoinage, fiscal year 1896	1,684,081	4,633,562	6,317,643
United States coin used in the arts, fiscal year 1896	1,500,000	100,000	1,600,000
Total	70,784,359	4,922,746	75,707,105
Estimated stock of coin July 1, 1896.	567,495,038	506,761,548	1,074,256,586

NOTE.—Of the silver coins, $430,790,041 were in dollars and $75,971,507 were in subsidiary coins.

The amounts of gold and silver coin melted for recoinage represent their nominal value.

In the Appendix (IX, p. 186) a table is given showing from what source these amounts were obtained.

The value of the gold and silver bullion owned by the Government in the mints and assay offices on July 1, 1896, was as follows:

BULLION IN MINTS AND ASSAY OFFICES JULY 1, 1896.

Metals.	Value.
Gold	$32,102,926
Silver (cost)	120,933,958
Total	153,036,884

The stock of silver bullion on deposit with the Mercantile Safe Deposit Company, in New York City, on July 1, 1896, was 1,496,471 fine ounces, of the commercial value of $1,032,565.

The total metallic stock of the United States on July 1, 1896, was as follows:

METALLIC STOCK OF THE UNITED STATES JULY 1, 1896.

Coin and bullion.	Value.
Gold	$599,597,964
Silver (including bullion in mints and Mercantile Safe Deposit Co.)	628,728,071
Total	1,228,326,035

The total metallic stock on July 1, 1895, was as follows:

METALLIC STOCK OF THE UNITED STATES JULY 1, 1895.

Coin and bullion.	Value.
Gold	$636,229,825
Silver (including bullion in mints and Mercantile Safe Deposit Co.)	625,854,949
Total	1,262,084,774

By comparing the amounts in the above tables it will be seen that the stock of gold in the United States decreased $36,631,861, while that of silver increased $2,873,122 during the fiscal year.

The ownership of the stock of gold and silver coin and bullion in the United States on July 1, 1896, was as follows:

OWNERSHIP OF GOLD AND SILVER IN THE UNITED STATES JULY 1, 1896.

Ownership.	Gold coin and bullion.	Silver coin and bullion.				Total gold and silver coin and bullion.
		Silver dollars.	Subsidiary silver coin.	Silver bullion.	Total silver.	
United States Treasury	a$102,494,781	b$48,015,946	$15,767,056	$120,933,958	$184,716,960	$287,211,741
National banks (July 14, 1896)	c161,853,560	d36,362,435	5,619,454	.....	41,981,889	203,835,449
Private banks and individuals	335,249,623	346,411,660	54,584,997	1,032,565	402,029,222	737,278,845
Total	599,597,964	430,790,041	75,971,507	121,966,523	628,728,071	1,228,326,035

a Gold coin and bullion in Treasury, exclusive of $42,198,119 gold certificates outstanding.
b Silver dollars in Treasury, exclusive of $330,657,191 silver certificates outstanding.
c Includes $51,720,400 Treasury and clearing-house gold certificates.
d Includes $29,495,375 silver certificates held by national banks.

The amount of standard silver dollars owned by the Treasury decreased $3,664,289, and the amount owned by national banks $1,013,081, while the amount owned by private banks and individuals increased $12,178,192, as compared with amounts so owned on July 1, 1895.

The following table shows the stock and the location of the metallic and paper money in the United States on July 1, 1896:

LOCATION OF THE MONEYS OF THE UNITED STATES JULY 1, 1896.

Moneys.	In Treasury.	In national banks July 14, 1896.	In other banks and in general circulation.	Total.
METALLIC.				
Gold bullion	$32,102,926			$32,102,926
Silver bullion	120,933,958		$1,032,565	121,966,523
Gold coin	112,589,974	*a* $141,517,160	313,387,904	567,495,038
Silver dollars	378,673,137	6,867,060	45,249,844	430,790,041
Subsidiary silver coin	15,767,056	5,619,454	54,584,997	75,971,507
Total	660,067,051	154,003,674	414,255,310	1,228,326,035
PAPER.				
Legal-tender notes (old issue)	122,431,148	113,213,290	111,036,578	346,681,016
Legal-tender notes (act July 14, 1890)	34,638,033		95,045,247	129,683,280
Gold certificates	620,070	20,336,400	21,861,719	42,818,189
Silver certificates	11,962,313	29,495,375	301,161,816	342,619,504
National-bank notes	10,832,425	*b* 22,132,927	193,035,195	226,000,547
Currency certificates	320,000	27,165,000	4,725,000	32,210,000
Total	180,803,989	212,342,992	726,865,555	1,120,012,536

a Includes $31,384,000 gold clearing-house certificates.

b Includes $4,688,181 of their own notes held by different national banks.

There were 52,116,904 standard silver dollars in actual circulation on July 1, 1896, while on July 1, 1895, there were 51,986,043, an increase of 130,861.

The total amount of money in circulation in the United States, exclusive of the amounts held by the Treasury and the silver bullion held by the Mercantile Safe Deposit Company, on July 1, 1896, was $1,506,434,966, against $1,601,968,473 on July 1, 1895, showing a decrease of $95,533,507.

The following table shows the approximate stock of coin in the United States on November 1, 1896:

STOCK OF GOLD AND SILVER COIN IN THE UNITED STATES NOVEMBER 1, 1896.

Date.	Gold coin.	Silver coin.			Total gold and silver coin.
		Dollars.	Subsidiary.	Total.	
Stock July 1, 1896	$567,495,038	$430,790,041	$75,971,507	$506,761,548	$1,074,256,586
Gain or loss since that date	56,552,446	8,762,100	—166,925	8,595,175	65,147,621
Total	624,047,484	439,552,141	75,804,582	515,356,723	1,139,404,207

At the same date the value of the gold and silver bullion in the mints and assay offices was as follows:

GOLD AND SILVER BULLION IN MINTS AND ASSAY OFFICES NOVEMBER 1, 1896.

Metal.	Cost value.
Gold	$48,178,391
Silver	115,383,231
Total	163,561,622

The amount of silver bullion in the vaults of the Mercantile Safe Deposit Company, of New York City, on November 1, 1896, was 1,051,265 fine ounces, of the commercial value of $693,835.

This amount, added to the gold and silver bullion in the mints and assay offices and the stock of coin in the United States, gives the approximate metallic stock as follows:

METALLIC STOCK NOVEMBER 1, 1896.

Coin and bullion.	Amount.
Gold	$672,225,875
Silver (bullion in mints and Mercantile Safe Deposit Co.)	631,433,789
Total	1,303,659,664

The location of the total metallic stock and paper money in the United States on November 1, 1896, was as follows:

LOCATION OF THE MONEYS OF THE UNITED STATES NOVEMBER 1, 1896.

Moneys.	In Treasury.	Outside of Treasury.	Total.
METALLIC.			
Gold bullion	$48,178,391		$48,178,391
Silver bullion	115,383,231	$693,835	116,077,066
Gold coin	107,706,505	516,340,979	624,047,484
Silver dollars	381,361,339	58,190,802	439,552,141
Subsidiary silver coin	14,632,846	61,171,736	75,804,582
Total	667,262,312	636,397,352	1,303,659,664
PAPER.			
Legal-tender notes (old issue)	89,730,690	256,950,326	346,681,016
Legal-tender notes (act of July 14, 1890)	39,269,516	83,959,764	123,229,280
Gold certificates	1,390,830	38,197,309	39,588,139
Silver certificates	8,686,382	357,777,122	366,463,504
National-bank notes	12,981,868	222,002,576	234,984,444
Currency certificates	2,595,000	32,465,000	35,060,000
Total	154,654,286	991,352,097	1,146,006,383

By way of comparison, a similar table is given, dated November 1, 1895:

LOCATION OF THE MONEYS OF THE UNITED STATES NOVEMBER 1, 1895.

Moneys.	In Treasury.	Outside of Treasury.	Total.
METALLIC.			
Gold bullion	$53,945,262		$53,945,262
Silver bullion	124,921,500	$157,108	125,078,608
Gold coin	88,951,327	475,181,593	564,132,920
Silver dollars	364,935,217	58,354,092	423,289,309
Subsidiary silver coin	13,426,421	63,832,759	77,259,180
Total	646,179,727	597,525,552	1,243,705,279
PAPER.			
Legal-tender notes (old issue)	107,694,736	238,986,280	346,681,016
Legal-tender notes (act of July 14, 1890)	26,565,611	114,526,669	141,092,280
Gold certificates	168,230	50,417,659	50,585,889
Silver certificates	8,953,268	333,456,235	342,409,504
National-bank notes	6,523,602	207,364,028	213,887,630
Currency certificates	275,000	56,740,000	57,015,000
Total	150,180,447	1,001,490,872	1,151,671,319

From the above tables it will be seen that there was an increase on November 1, 1896, as compared with November 1, 1895, of $21,082,585 in the amount of coin and bullion in the Treasury, and of $4,473,839 in the amount of paper money, a total net increase of $25,556,424.

There was also an increase of $38,335,073 in the amount of coin in circulation and an increase of $536,727 in bullion held by the Mercantile Safe Deposit Company of New York at the same date, while the amount of paper money in circulation decreased $10,138,775, showing a total net increase in the actual amount of money in circulation of $28,733,025.

MONETARY SYSTEMS AND APPROXIMATE STOCKS OF MONEY IN THE PRINCIPAL COUNTRIES OF THE WORLD.

The following table, showing the monetary systems and the approximate stock of gold, silver, and uncovered paper money in the principal countries of the world, has been compiled from the latest information obtainable, and, while necessarily but an estimate, is believed to exhibit approximately the stock of money in the world.

MONETARY SYSTEMS AND APPROXIMATE STOCKS OF MONEY IN THE AGGRE

	Countries.	Monetary system.	Ratio between gold and full legal-tender silver.	Ratio between gold and limited-tender silver.	Population.	Stock of gold.
1	United States *a*	Gold and silver	1 to 15.98	1 to 14.95	71,900,000	$672,200,000
2	United Kingdom	Gold		1 to 14.28	39,300,000	*c* 584,000,000
3	France	Gold and silver	1 to 15½	1 to 14.38	38,400,000	*c* 772,000,000
4	Germany	Gold		1 to 13.957	52,300,000	*b* 675,000,000
5	Belgium	Gold and silver	1 to 15½	1 to 14.38	6,300,000	*b* 50,000,000
6	Italy	do	1 to 15½	1 to 14.38	30,900,000	*c* 100,400,000
7	Switzerland	do	1 to 15½	1 to 14.38	3,000,000	*c* 16,000,000
8	Greece	do	1 to 15½	1 to 14.38	2,200,000	*b* 500,000
9	Spain	do	1 to 15½	1 to 14.38	18,000,000	*c* 38,600,000
10	Portugal	Gold		1 to 14.08	5,100,000	*c* 5,100,000
11	Roumania	Gold and silver			5,400,000	*c* 38,600,000
12	Servia	do			2,300,000	*c* 1,500,000
13	Austria-Hungary	Gold		1 to 13.69	44,500,000	*c* 167,200,000
14	Netherlands	Gold and silver	1 to 15⅝	1 to 15	4,800,000	*c* 26,800,000
15	Norway	Gold		1 to 14.88	2,000,000	*c* 7,500,000
16	Sweden	do		1 to 14.88	4,800,000	*c* 8,500,000
17	Denmark	do		1 to 14.88	2,300,000	*c* 16,500,000
18	Russia	Silver	1 to 15½	1 to 12.90	126,000,000	*c* 488,600,000
19	Turkey	Gold and silver	1 to 15⅞	1 to 15⅞	22,000,000	*b* 50,000,000
20	Australasia	Gold		1 to 14.28	4,900,000	*b* 130,000,000
21	Egypt	do		1 to 15.68	7,000,000	*d* 129,300,000
22	Mexico	Silver	1 to 16½		12,600,000	*b* 5,000,000
23	Central American States	do	1 to 15½		5,600,000	*b* 500,000
24	South American States	do *e*	1 to 15½		36,000,000	*b* 40,000,000
25	Japan *f*	Gold and silver	1 to 16.18		44,000,000	*c* 79,500,000
26	India	do	1 to 15		296,000,000	
27	China	Silver			360,000,000	
28	Straits Settlements	do			*g* 3,800,000	
29	Canada	Gold		1 to 14.28	5,800,000	*c* 16,000,000
30	Cuba	Gold and silver	1 to 15½		1,800,000	*b* 15,000,000
31	Haiti	do	1 to 15½		1,000,000	*c* 4,000,000
32	Bulgaria	do	1 to 15½	1 to 14.38	3,300,000	*b* 800,000
33	Siam	Silver			5,000,000	*c* 600,000
34	Hawaii	Gold and silver	1 to 15.98	1 to 14.95	100,000	*c* 4,000,000
	Total					4,143,700,000

a November 1, 1896; all other countries January 1, 1896.
b Estimate, Bureau of the Mint.
c Information furnished through United States representatives.
d Haupt.
e Except Venezuela and Chile.

GATE AND PER CAPITA IN THE PRINCIPAL COUNTRIES OF THE WORLD.

Stock of silver.			Uncovered paper.	Per capita.				
Full tender.	Limited tender.	Total.		Gold.	Silver.	Paper.	Total.	
$555,600,000	$75,800,000	$631,400,000	$424,400,000	$9.35	$8.78	$5.90	$24.03	1
.....	c121,700,000	121,700,000	c111,800,000	14.86	3.10	2.84	20.80	2
c434,300,000	c57,900,000	492,200,000	c98,000,000	20.10	12.82	2.55	35.47	3
b92,000,000	b115,000,000	207,000,000	c126,100,000	12.91	3.96	2.41	19.28	4
b50,000,000	b7,000,000	57,000,000	c72,500,000	7.93	9.05	11.51	28.49	5
c12,500,000	c26,500,000	39,000,000	c168,500,000	3.25	1.26	5.45	9.96	6
.....	c2,100,000	2,100,000	c14,300,000	5.33	.70	4.77	10.80	7
b500,000	b1,000,000	1,500,000	c14,200,000	.23	.68	6.45	7.36	8
.....	c49,300,000	49,300,000	c103,000,000	2.14	2.74	5.72	10.60	9
.....	c7,400,000	7,400,000	c59,700,000.	1.00	1.45	11.71	14.16	10
.....	c10,600,000	10,600,000	c11,800,000	7.15	1.96	2.19	11.30	11
.....	c1,700,000	1,700,000	c3,000,000	.65	.74	1.30	2.69	12
c25,000,000	c40,000,000	65,000,000	c204,500,000	3.76	1.46	4.59	9.81	13
c52,900,000	c3,300,000	56,200,000	c32,500,000	5.58	11.71	6.77	24.06	14
.....	c2,000,000	2,000,000	c3,800,000	3.75	1.00	1.90	6.65	15
.....	c4,900,000	4,900,000	.....	1.77	1.02	.....	2.79	16
.....	c5,400,000	5,400,000	c4,600,000	7.17	2.35	2.00	11.52	17
c3,500,000	b40,000,000	43,500,000	c467,200,000	3.88	.35	3.70	7.93	18
b30,000,000	d10,000,000	40,000,000	.....	2.27	1.82	.....	4.09	19
.....	b7,000,000	7,000,000	.....	26.53	1.43	.....	27.96	20
.....	d5,200,000	5,200,000	.....	18.47	.74	.....	19.21	21
c97,000,000	.....	97,000,000	c4,000,000	.39	7.70	.32	8.41	22
c12,000.000	.....	12,000,000	c8,000,000	.09	2.14	1.43	3.66	23
b35,000,000	.....	35,000,000	b550,000,000	1.11	.97	15.28	17.36	24
c69,200,000	c18,500,000	87,700,000	.....	1.81	1.99	.....	3.80	25
h950,000,000	.....	950,000,000	i37,000,000	.....	3.21	.12	3.33	26
b750,000,000	.....	750,000,000	.....	.....	2.08	.....	2.08	27
d240,000,000	d2,000,000	242,000,000	.....	.....	63.68	.....	63.68	28
c5,000,000	c1,000,000	6,000,000	c35,000,000	2.76	1.03	6.03	9.82	29
b1,500,000	.....	1,500,000	.....	8.33	.83	.....	9.16	30
c3,000,000	b1,500,000	4,500,000	c4,100,000	4.00	4.50	4.10	12.60	31
b3,400,000	b3,400,000	6,800,000	.....	.24	2.06	.....	2.30	32
c193,300,000	.....	193,300,000	.....	.12	38.66	.....	38.78	33
c1,000,000	.....	1,000,000	.....	40.00	10.00	.....	50.00	34
3,616,700,000	620,200,000	4,236,900,000	2,558,000,000	.....	.....	.....	.....	

f Actually the silver standard.
g Includes Aden and Perim, Ceylon, Hongkong, Labuan, and Straits Settlements.
h F. C. Harrison.
i Indian currency committee report.

The estimate of the stock of silver in the Straits Settlements is that of Ottomar Haupt for 1893. He says:

"The currency of the Straits consists mainly of Mexican dollars, nine-tenths of the total amount of which in the colony came there by the way of Europe. They are unloaded at Penang and Singapore, but do not remain there nor in the colony in general. The latter, with a population of 540,000, would never be able to absorb the enormous sums which we shall show by exact figures to have been exported thither. And yet it is not possible to tell how or by what way they have been reexported.

We know that the Malay Peninsula, as well as Borneo, Sumatra, Siam, and the English and French possessions in India receive annually a certain amount of these coins from the Straits; that, moreover, the Chinese coolies carry away some when they return to China; that occasionally there are direct shipments from Singapore to Penang and thence to China and Japan. But these circumstances are not sufficient to establish the proportion between the stocks in the colony and the incessant and comparatively enormous arrivals of piasters from Europe. The exports from 1869 to 1880 from Bombay and Calcutta to the Straits were £635,000, while the imports during the same period were £2,292,000 for these eleven years; therefore there was a balance exported from the Straits to India of £1,600,000. Beginning with 1880 the statistics are, unfortunately, lacking.

If, now, we turn to the exports from England to the Straits, we find, according to Pixley & Abell's Circular, that they were as follows:

Years.	Amount.
1865–1868	£519, 097
1869–1874	5, 493, 524
1875–1878	4, 044, 712
1879–1880	2, 332, 027
1881–1882	2, 246, 375
1883–1884	3, 971, 176
1885	638, 682
1886	594, 280
Total	19, 839, 873

There is only one conclusion to be drawn from these figures, which are altogether disproportionate to the extent of territory of the Straits and to the number of the population; it is that a great part of the imported coins are hidden somewhere, either in the Straits Settlements themselves, or in the neighboring countries, which receive such coins more or less regularly from Penang or Singapore.

The divisional coin and piasters shipped to the Straits from England from 1878 to 1886, were as follows:

Year.	Divisional coins.	Piasters.
1878	90,000	5,592,000
1879	50,000	6,732,000
1880	45,000	7,260,000
1881	75,000	4,410,000
1882	70,000	9,066,000
1883	60,000	13,794,000
1884	190,000	10,032,000
1885	70,000	3,834,000
1886	175,000	3,564,000

Everything considered, we may estimate the stock of silver in piasters, dollars, and yens held in one shape or another in the Straits Settlements in 1886 at £20,100,000, perhaps £25,000,000. The circulation of divisional coins, according to our estimate, does not exceed 800,000 piasters.

Such was the situation in 1886. From that year to 1891 the English Government shipped to the Straits 227,000 piasters in divisional coin, and the total shipped from 1871 to 1891 was 2,684,850 piasters.

On the other hand, the shipments of piasters from England to the Straits were as follows:

Year.	Piasters.
1887	8,240,000
1889	11,410,000
1890	6,120,000
1891	14,800,000
1892	19,600,000

This large increase of divisional coin and of piasters, together amounting to 61,000,000 piasters, brings our estimate of the stock of silver at the beginning of 1893 to 240,000,000 piasters and 2,000,000 piasters in divisional coin."

WORLD'S STOCK OF MONEY IN THE PRINCIPAL COUNTRIES, 1873.

Numerous inquiries have been made within the last few years for information as to the stock of money in the principal countries of the world at different periods, but especially as to 1873.

The table following, showing the stock of money in 1873 in the countries named therein, has been compiled from the most reliable data obtainable.

APPROXIMATE STOCKS OF MONEY IN THE AGGREGATE AND PER CAPITA IN THE PRINCIPAL COUNTRIES OF THE WORLD, 1873.

Country.	Population.	Stock of gold.	Stock of silver.	Uncovered paper.	Per capita.			
					Gold.	Silver.	Paper.	Total.
United States	41,700,000	$135,000,000	$6,150,000	$749,445,000	$3.24	$0.15	$17.97	$21.36
Great Britain	31,800,000	160,000,000	95,000,000	59,800,000	5.03	2.99	1.88	9.90
France	36,100,000	450,000,000	500,000,000	385,300,000	12.47	13.85	10.67	36.99
Germany	41,000,000	160,200,000	306,235,000	90,800,000	3.91	7.47	2.21	13.59
Russia	82,200,000	149,100,000	18,600,000	618,400,000	1.81	.23	7.52	9.56
Italy	26,800,000	20,000,000	23,000,000	87,800,000	.75	.86	3.27	4.88
Belgium	5,200,000	25,000,000	15,000,000	35,100,000	4.81	2.88	6.75	14.44
Netherlands	3,900,000	12,000,000	37,300,000	15,300,000	3.08	9.56	3.92	16.56
Austria-Hungary	35,900,000	35,000,000	40,000,000	265,800,000	.98	1.11	7.40	9.49
Australasia	2,600,000	50,000,000	3,000,000	.....	19.23	1.15	.....	20.38
Denmark	1,800,000	4,100,000	7,500,000	6,500,000	2.28	4.16	3.61	10.05
Sweden	4,400,000	1,800,000	4,300,000	6,000,000	.41	.98	1.36	2.75
Norway	1,800,000	7,600,000	1,600,000	2,300,000	4.22	.89	1.28	6.39
Total	.....	1,209,800,000	1,057,685,000	2,322,545,000	.....	.....	.....	.....

STOCK OF GOLD AND SILVER IN THE UNITED STATES FROM 1873 TO 1896.

The following table shows the stock of gold and silver and the amount per capita at the close of each fiscal year from 1873 to 1896, prepared from the reports of the Director of the Mint:

ESTIMATED STOCK OF GOLD AND SILVER IN THE UNITED STATES AND THE AMOUNT PER CAPITA AT THE CLOSE OF EACH FISCAL YEAR FROM 1873 TO 1896, INCLUSIVE.

Fiscal year ending June 30—	Population.	Total coin and bullion.		Per capita.		
		Gold.	Silver.	Gold.	Silver.	Total metallic.
1873	41,677,000	$135,000,000	$6,149,305	$3.23	$0.15	$3.38
1874	42,796,000	147,379,493	10,355,478	3.44	.24	3.68
1875	43,951,000	121,134,906	19,367,995	2.75	.44	3.19
1876	45,137,000	130,056,907	36,415,992	2.88	.81	3.69
1877	46,353,000	167,501,472	56,464,427	3.61	1.21	4.82
1878	47,598,000	213,199,977	88,047,907	4.47	1.85	6.32
1879	48,866,000	245,741,837	117,526,341	5.02	2.40	7.42
1880	50,155,783	351,841,206	148,522,678	7.01	2.96	9.97
1881	51,316,000	478,484,538	175,384,144	9.32	3.41	12.73
1882	52,495,000	506,757,715	203,217,124	9.65	3.87	13.52
1883	53,693,000	542,732,063	233,007,985	10.10	4.34	14.44
1884	54,911,000	545,500,797	255,568,142	9.93	4.65	14.58
1885	56,148,000	588,697,036	283,478,788	10.48	5.05	15.53
1886	57,404,000	590,774,461	312,252,844	10.29	5.44	15.73
1887	58,680,000	654,520,335	352,993,566	11.15	6.00	17.15
1888	59,974,000	705,818,855	386,611,108	11.76	6.44	18.20
1889	61,289,000	680,063,505	420,548,929	11.09	6.86	17.95
1890	62,622,250	695,563,029	463,211,919	11.10	7.39	18.49
1891	63,975,000	646,582,852	522,277,740	10.10	8.16	18.26
1892	65,520,000	664,275,335	570,313,544	10.15	8.70	18.85
1893	66,946,000	597,697,685	615,861,484	8.93	9.20	18.13
1894	68,397,000	627,293,201	624,347,757	9.18	9.13	18.31
1895	69,878,000	636,229,825	625,854,949	9.10	8.97	18.07
1896	71,390,000	599,597,964	628,728,071	8.40	8.81	17.21

GOLD AND SILVER USED IN THE INDUSTRIAL ARTS.

The amount of gold and silver used in the industrial arts, in the United States during the calendar year 1895, has been ascertained, as in former years, by making inquiries of the Government institutions and the private refineries.

In answer to these inquiries, statements were received showing the amount and value of gold and silver bars sold to manufacturers and jewelers for industrial use, and, as nearly as possible, the class of material used in the manufacture of such bars.

The weight and value of gold and silver bars furnished manufacturers and jewelers by the United States assay office at New York during the calender year 1895 were as follows:

BARS MANUFACTURED FOR USE IN THE INDUSTRIAL ARTS BY THE UNITED STATES ASSAY OFFICE AT NEW YORK DURING THE CALENDAR YEAR ENDED DECEMBER 31, 1895.

Material used.	Gold.		Silver.	
	Fine ounces.	Value.	Fine ounces.	Coining value.
United States coin	.....	.....	1,384.92	$1,790.60
Domestic bullion	327,437.721	$6,768,738.42	5,301,347.20	6,854,267.09
Foreign material	22,285.942	460,691.31	652,692.50	843,885.24
Old plate, jewelry, etc	89,246.013	1,844,878.81	597,028.77	771,916.00
Total	438,969.676	9,074,308.54	6,552,453.39	8,471,858.93

The weight and value of gold and silver in bars furnished manufacturers and jewelers by the United States mint at Philadelphia during the calendar year 1895 were as follows:

VALUE AND COMPOSITION OF BARS MANUFACTURED FOR USE IN THE INDUSTRIAL ARTS BY THE UNITED STATES MINT AT PHILADELPHIA DURING THE CALENDAR YEAR 1895.

Material used.	Gold.		Silver.	
	Fine ounces.	Value.	Fine ounces.	Coining value.
Domestic bullion	40,350.311	$834,114.95	140.30	$181.40
United States coin	1,896.339	39,200.82	.....	.....
Jewelry, etc	3,624.559	74,926.28	37,332.96	48,268.88
Total	45,871.209	948,242.05	37,473.26	48,450.28

The weight and value of gold and silver in bars furnished manufacturers and jewelers by the private refineries in the United States during the calendar year 1895 were as follows:

BARS FOR INDUSTRIAL USE FURNISHED GOLDSMITHS AND OTHERS BY PRIVATE REFINERIES DURING THE CALENDAR YEAR 1895.

Material used.	Gold bars manufactured.		Silver bars manufactured.	
	Fine ounces.	Value.	Fine ounces.	Coining value.
Domestic bullion (exclusive of United States bars)	42,519	$878,936	2,297,836	$2,970,939
United States bars	30,636	633,292	1,326,521	1,715,098
United States coin	8,361	172,845	.....	.....
Old plate, jewelry, and other old material	51,106	1,056,464	431,540	557,951
Foreign bullion and coin	500	10,336	100,250	129,616
Total	133,122	2,751,873	4,156,147	5,373,604

Number of firms addressed 49
Number replying 46
Number not manufacturing 21
Number manufacturing 25

The value of United States bars—bars bearing the stamp of a United States mint or assay office—was, gold, $633,292; silver, $1,715,098.

These bars are manufactured by Government institutions and are included in their tables, and, in order to avoid duplication, must be eliminated from the amounts reported by private refineries.

The weight and value of gold and silver bars, exclusive of United States bars, furnished by private refineries for industrial purposes during the calendar year 1895 were as follows:

BARS FOR INDUSTRIAL USE (EXCLUSIVE OF GOVERNMENT BARS) FURNISHED GOLDSMITHS AND OTHERS BY PRIVATE REFINERIES DURING THE CALENDAR YEAR 1895.

Material used.	Gold bars manufactured.		Silver bars manufactured.	
	Fine ounces.	Value.	Fine ounces.	Coining value.
Domestic bullion	42,519	$878,936	2,297,836	$2,970,939
United States coin	8,361	172,845	.....	.....
Old plate, jewelry, and other old material	51,106	1,056,464	431,540	557,951
Foreign bullion and coin	500	10,336	100,250	129,616
Total	102,486	2,118,581	2,829,626	3,658,506

The value of the gold and silver bars for industrial purposes furnished by Government institutions and private refineries during the calendar year 1895 was as follows:

GOLD AND SILVER BARS FURNISHED FOR USE IN MANUFACTURES AND THE ARTS DURING THE CALENDAR YEAR 1895, AND CLASSIFICATION OF THE MATERIAL USED.

Material used.	Gold.	Silver (coining value).	Total.
Domestic bullion	$8,481,789	$9,825,387	$18,307,176
United States coin	212,046	1,791	213,837
Old material	2,976,269	1,378,136	4,354,405
Foreign bullion and coin	471,027	973,501	1,444,528
Total	12,141,131	12,178,815	24,319,946

The value of the gold and silver bars for industrial purposes furnished by Government institutions and private refineries during the calendar year 1894 was as follows:

GOLD AND SILVER BARS FURNISHED FOR USE IN MANUFACTURES AND THE ARTS DURING THE CALENDAR YEAR 1894, AND CLASSIFICATION OF THE MATERIAL USED.

Material used.	Gold.	Silver (coining value).	Total.
Domestic bullion	$6,430,073	$8,579,472	$15,009,545
United States coin	396,167	.....	396,167
Foreign bullion and coin	543,585	982,399	1,525,984
Old material	2,184,946	1,221,177	3,406,123
Total	9,554,771	10,783,048	20,337,819

A comparison of the values of the precious metals used in the industrial arts in the United States during the calendar years 1894 and 1895 shows an increase during the latter year of $2,586,360 in gold and $1,395,767 in silver.

Government institutions and private refineries report that during the calendar year 1895 there were $212,046 in United States gold coin and $1,791 in United States silver coin consumed in the manufacture of bars for industrial purposes.

There are no returns showing the actual amount of United States gold and silver coins melted down by goldsmiths and jewelers, as the amount thus consumed would not appear in the reports of institutions manufacturing bars.

Assuming the total amount of United States gold coin used in the arts to be $1,500,000 and silver coin $100,000, the industrial consumption of the precious metals in the United States during the calendar year 1895 would be as follows:

INDUSTRIAL CONSUMPTION OF THE PRECIOUS METALS DURING THE CALENDAR YEAR 1895.

Material used.	Gold.	Silver (coining value).	Total.
Domestic bullion	$8,481,789	$9,825,387	$18,307,176
United States coin	1,500,000	100,000	1,600,000
Old material	2,976,269	1,378,136	4,354,405
Foreign bullion and coin	471,027	973,501	1,444,528
Total	13,429,085	12,277,024	25,706,109

GOLD BARS EXCHANGED FOR GOLD COIN, CALENDAR YEAR 1895.

Month.	Philadelphia.	New York.	Total.
January	$85,593.29	$2,218,344.68	$2,303,937.97
February	95,526.71	659,125.46	754,652.17
March	75,354.65	349,107.84	424,462.49
April	50,206.91	327,048.72	377,255.63
May	60,230.96	334,011.42	394,242.38
June	90,366.61	390,406.60	480,773.21
July	55,259.65	440,895.40	496,155.05
August	65,383.22	528,480.49	593,863.71
September	65,262.03	760,158.90	825,420.93
October	85,480.31	784,356.20	869,836.51
November	70,299.22	5,892,161.59	5,962,460.81
December	35,151.39	12,442,526.15	12,477,677.54
Total	834,114.95	25,126,623.45	25,960,738.40

All the gold bars ($834,114.95) exchanged for gold coin at Philadelphia and $6,768,738.42 of the amount of gold bars exchanged for gold coin at New York, under the provisions of the act of May 26, 1882, were employed in the industrial arts. The remainder of the total bars exchanged, viz, $18,357,885.03, were exported.

The following table shows the amounts and classification of the material used in the industrial arts in the United States each year since 1880:

GOLD AND SILVER BARS FURNISHED FOR USE IN MANUFACTURES AND THE ARTS, AND CLASSIFICATION OF THE MATERIAL USED, DURING THE CALENDAR YEARS 1880–1895.

GOLD.

Calendar year.	United States coin.	New material.	Old material.	Foreign bullion and coin.	Total.
1880	$3,300,000	$6,000,000	$395,000	$1,267,600	$10,962,600
1881	2,700,000	7,000,000	522,900	1,547,800	11,770,700
1882	2,500,000	7,000,000	696,500	671,500	10,868,000
1883	4,875,000	7,840,000	1,549,300	194,500	14,458,800
1884	5,000,000	6,000,000	3,114,500	385,500	14,500,000
1885	3,500,000	6,736,927	1,408,902	178,913	11,824,742
1886	3,500,000	7,003,480	1,928,046	638,003	13,069,529
1887	3,500,000	9,090,342	1,835,882	384,122	14,810,346
1888	3,500,000	9,893,057	2,402,976	718,809	16,514,842
1889	3,500,000	9,686,827	3,218,971	291,258	16,697,056
1890	3,500,000	10,717,472	3,076,426	362,062	17,655,960
1891	3,500,000	10,697,679	4,860,712	628,525	19,686,916
1892	3,500,000	10,588,703	4,468,685	771,686	19,329,074
1893	1,500,000	8,354,482	2,777,165	804,254	13,435,901
1894	1,500,000	6,430,073	2,184,946	543,585	10,658,604
1895	1,500,000	8,481,789	2,976,269	471,027	13,429,085
Total	50,875,000	131,520,831	37,417,180	9,859,144	229,672,155

SILVER (COINING VALUE).

1880	$600,000	$5,000,000	$145,000	$353,000	$6,098,000
1881	200,000	5,900,000	178,000	371,000	6,649,000
1882	200,000	6,344,300	212,900	440,300	7,197,500
1883	200,000	4,623,700	561,900	155,000	5,540,600
1884	200,000	4,500,000	170,000	650,000	5,520,000
1885	200,000	4,539,875	462,186	62,708	5,264,769
1886	200,000	3,626,195	404,155	825,615	5,055,965
1887	200,000	4,102,734	480,606	654,991	5,438,331
1888	200,000	6,477,857	652,047	771,985	8,101,889
1889	200,000	7,297,933	611,015	657,997	8,766,945
1890	200,000	7,143,635	640,100	1,245,419	9,229,154
1891	200,000	7,289,073	858,126	1,256,101	9,603,300
1892	200,000	7,204,210	647,377	1,249,801	9,301,388
1893	100,000	6,570,737	1,222,836	1,740,704	9,634,277
1894	100,000	8,579,472	1,221,177	982,399	10,883,048
1895	100,000	9,825,387	1,378,136	973,501	12,277,024
Total	3,300,000	99,025,108	9,845,561	12,390,521	124,561,190

The weight and value of gold and silver bars manufactured for industrial use by Government institutions during the fiscal year ended June 30, 1896, were as follows:

VALUE AND COMPOSITION OF BARS MANUFACTURED FOR USE IN THE INDUSTRIAL ARTS BY UNITED STATES MINT AT PHILADELPHIA DURING THE FISCAL YEAR ENDED JUNE 30, 1896.

Material used.	Gold.		Silver.	
	Fine ounces.	Value.	Fine ounces.	Coining value.
Domestic bullion	33,541.299	$693,360.17	140.30	$181.40
United States coin	1,043.030	21,561.34	.....	.....
Jewelry, etc	3,486.911	72,080.85	47,009.05	60,779.38
Total	38,071.240	787,002.36	47,149.35	60,960.78

BARS MANUFACTURED FOR USE IN THE INDUSTRIAL ARTS BY THE UNITED STATES ASSAY OFFICE AT NEW YORK DURING THE FISCAL YEAR ENDED JUNE 30, 1896.

Material used.	Gold.		Silver.	
	Fine ounces.	Value.	Fine ounces.	Coining value.
Domestic bullion	334,085.841	$6,918,570.35	4,206,307.17	$5,438,457.75
Foreign material	15,963.772	330,000.45	690,632.00	892,938.34
Old plate, jewelry, etc	86,993.186	1,798,308.75	602,528.61	779,026.91
United States coin	.....	.....	1,683.37	2,176.47
Total	437,642.799	9,046,879.55	5,501,151.15	7,112,599.47

BARS MANUFACTURED BY GOVERNMENT INSTITUTIONS FOR USE IN THE INDUSTRIAL ARTS DURING THE FISCAL YEAR ENDED JUNE 30, 1896.

Material used.	Gold.		Silver.	
	Fine ounces.	Value.	Fine ounces.	Coining value.
Domestic bullion	368,227.140	$7,611,930.52	4,206,447.47	$5,438,639.15
United States coin	1,043.030	21,561.34	1,683.37	2,176.47
Foreign material	15,963.772	330,000.45	690,632.00	892,938.34
Old plate, jewelry, etc	90,480.097	1,870,389.60	649,537.66	839,806.29
Total	475,714.039	9,833,881.91	5,548,300.50	7,173,560.25

A comparison of these values with the values of the bars manufactured during the fiscal year ended June 30, 1895, shows an increase in the value of the gold bars manufactured of $843,320, and a decrease in the coining value of the silver bars manufactured of $1,654,459, during the last fiscal year, as evidenced by the following table:

BARS MANUFACTURED BY GOVERNMENT INSTITUTIONS FOR USE IN THE INDUSTRIAL ARTS DURING THE FISCAL YEAR ENDED JUNE 30, 1895.

Material used.	Gold.		Silver.	
	Fine ounces.	Value.	Fine ounces.	Coinage value.
United States coin	2,380.327	$49,205.72	.....	.....
Domestic bullion	328,237.391	6,785,269.09	5,435,980.70	$7,028,338.68
Foreign material	27,665.499	571,896.63	848,251.26	1,096,728.90
Old plate, jewelry, etc	76,635.241	1,584,191.02	543,689.07	702,951.53
Total	434,918.458	8,990,562.46	6,827,921.03	8,828,019.11

EXCHANGE OF GOLD BARS FOR GOLD COIN.

The value of gold bars manufactured by the United States mint at Philadelphia and the assay office at New York, for use in the industrial arts, and exchanged for gold coin of full legal weight, during the fiscal year 1896, was $36,911,631.08, an increase over the previous fiscal year of $29,124,884.53.

Month.	Philadelphia.	New York.	Total.
1895.			
July	$55,259.65	$440,895.40	$496,155.05
August	65,383.22	528,480.49	593,863.71
September	65,262.03	760,158.90	825,420.93
October	85,480.31	784,356.20	869,836.51
November	70,299.22	5,892,161.59	5,962,460.81
December	35,151.39	12,442,526.15	12,477,677.54
1896.			
January	65,422.86	9,635,106.97	9,700,529.83
February	55,268.53	547,417.13	602,685.66
March	60,264.24	591,195.32	651,459.56
April	40,169.00	416,702.31	456,871.31
May	45,189.69	3,799,060.38	3,844,250.07
June	50,210.03	380,210.07	430,420.10
Total	693,360.17	36,218,270.91	36,911,631.08
Fiscal year 1895	869,362.35	6,917,384.20	7,786,746.55

Of the amount exchanged at the assay office at New York, $29,897,201.82 was exported, while $6,321,069.09, together with $693,360.17 exchanged at the mint at Philadelphia, entered into the industrial arts in this country.

The approximate weight and value of gold and silver employed in the industrial arts in certain countries during the calendar year 1895 are as follows:

THE WORLD'S INDUSTRIAL CONSUMPTION OF GOLD AND SILVER IN 1895.

Countries.	Gold.		Silver.		
	Weight.	Value.	Weight.	Coining value.	Commercial value.
	Kilograms.		*Kilograms.*		
Austria-Hungary	3,350	$2,226,410	58,000	$2,410,480	$1,227,048
Belgium, Netherlands	3,100	2,060,260	32,000	1,329,920	676,992
England	15,500	10,301,300	140,000	5,818,400	2,961,840
France	15,200	10,101,920	141,750	5,891,130	2,998,863
Germany	13,200	8,772,720	150,000	6,234,000	3,173,400
Italy	5,000	3,323,000	21,000	872,760	444,276
Portugal	1,400	930,440	5,000	207,800	105,780
Russia	3,953	2,627,164	109,368	4,545,334	2,313,790
Sweden	304	202,038	3,000	124,680	63,468
Switzerland	8,907	5,919,592	28,500	1,184,460	602,946
United States	15,728	10,452,816	262,245	10,898,888	5,548,055
Other countries	2,500	1,661,500	45,000	1,870,200	952,020
Total	88,142	58,579,160	995,863	41,388,052	21,068,478

PRODUCT OF GOLD AND SILVER IN THE UNITED STATES.

The statistics of the production of gold and silver in the United States for the calendar year 1895 were given in a special report made to the Secretary of the Treasury upon the production of the precious metals for 1895.

The following table shows the product as distributed among producing States and Territories:

APPROXIMATE DISTRIBUTION, BY PRODUCING STATES AND TERRITORIES, OF THE PRODUCT OF GOLD AND SILVER IN THE UNITED STATES FOR THE CALENDAR YEAR 1895 AS ESTIMATED BY THE DIRECTOR OF THE MINT.

State or Territory.	Gold.		Silver.		Total value.
	Fine ounces.	Value.	Fine ounces.	Coining value.	
Alaska	78,140	$1,615,300	67,200	$86,880	$1,702,180
Arizona	95,072	1,965,300	986,900	1,275,990	3,241,290
California	722,171	14,928,600	653,700	845,180	15,773,780
Colorado	613,634	13,305,100	23,398,500	30,252,600	43,557,700
Georgia	6,192	128,000	400	520	128,520
Idaho	86,088	1,779,600	3,110,600	4,021,780	5,801,380
Michigan	2,075	42,900	37,300	48,220	91,120
Montana	198,405	4,101,400	17,569,100	22,715,600	26,817,000
Nevada	75,088	1,552,200	956,200	1,236,290	2,788,490
New Mexico	23,810	492,200	694,800	898,320	1,390,520
North Carolina	2,622	54,200	400	520	54,720
Oregon	42,972	888,300	51,000	65,930	954,230
South Carolina	6,212	128,400	400	520	128,920
South Dakota	187,187	3,869,500	159,300	205,960	4,075,460
Texas	.....	.....	450,000	581,810	581,810
Utah	66,419	1,373,000	7,468,100	9,655,720	11,028,720
Washington	16,980	351,000	122,700	158,640	509,640
Alabama, Connecticut, Minnesota, Nebraska, Tennessee, Virginia, Wyoming	1,693	35,000	400	520	35,520
Total	2,254,760	46,610,000	55,727,000	72,051,000	118,661,000

The following table shows the production of gold and silver from the mines of the United States in the years 1860 to 1895.

(The silver product is given at its commercial value, reckoned at the average market price of silver each year, as well as its coining value in United States dollars.)

PRODUCT OF GOLD AND SILVER FROM MINES IN THE UNITED STATES, 1860–1895.

[The estimate for 1860–1872 is by R. W. Raymond, commissioner, and since 1872 by the Bureau of the Mint.]

Calendar year.	Gold.		Silver.		
	Fine ounces.	Value.	Fine ounces.	Commercial value.	Coining value.
1860	2,225,250	$46,000,000	116,015	$157,000	$150,000
1861	2,080,125	43,000,000	1,546,875	2,062,000	2,000,000
1862	1,896,300	39,200,000	3,480,469	4,685,000	4,500,000
1863	1,935,000	40,000,000	6,574,219	8,842,000	8,500,000
1864	2,230,088	46,100,000	8,507,812	11,443,000	11,000,000
1865	2,574,759	53,225,000	8,701,171	11,642,000	11,250,000
1866	2,588,063	53,500,000	7,734,375	10,356,000	10,000,000
1867	2,502,197	51,725,000	10,441,406	13,866,000	13,500,000
1868	2,322,000	48,000,000	9,281,250	12,307,000	12,000,000
1869	2,394,563	49,500,000	9,281,250	12,298,000	12,000,000
1870	2,418,750	50,000,000	12,375,000	16,734,000	16,000,000
1871	2,104,313	43,500,000	17,789,062	23,578,000	23,000,000
1872	1,741,500	36,000,000	22,236,328	29,396,000	28,750,000
Total	29,012,908	599,750,000	118,065,232	157,366,000	152,650,000
1873	1,741,500	36,000,000	27,650,000	35,890,000	35,750,000
1874	1,620,563	33,500,000	28,849,000	36,869,000	37,300,000
1875	1,615,725	33,400,000	24,518,000	30,549,000	31,700,000
1876	1,930,162	39,900,000	30,009,000	34,690,000	38,800,000
1877	2,268,788	46,900,000	30,783,000	36,970,000	39,800,000
1878	2,476,800	51,200,000	34,960,000	40,270,000	45,200,000
1879	1,881,787	38,900,000	31,550,000	35,430,000	40,800,000
1880	1,741,500	36,000,000	30,320,000	34,720,000	39,200,000
1881	1,678,612	34,700,000	33,260,000	37,850,000	43,000,000
1882	1,572,187	32,500,000	36,200,000	41,120,000	46,800,000
1883	1,451,250	30,000,000	35,730,000	39,660,000	46,200,000
1884	1,489,950	30,800,000	37,800,000	42,070,000	48,800,000
1885	1,538,325	31,800,000	39,910,000	42,500,000	51,600,000
1886	1,693,125	35,000,000	39,440,000	39,230,000	51,000,000
1887	1,596,375	33,000,000	41,260,000	40,410,000	53,350,000
1888	1,604,841	33,175,000	45,780,000	43,020,000	59,195,000
1889	1,587,000	32,800,000	50,000,000	46,750,000	64,646,000
1890	1,588,880	32,845,000	54,500,000	57,225,000	70,465,000
1891	1,604,840	33,175,000	58,330,000	57,630,000	75,417,000
1892	1,596,375	33,000,000	63,500,000	55,563,000	82,101,000
1893	1,739,323	35,955,000	60,000,000	46,800,000	77,576,000
1894	1,910,813	39,500,000	49,500,000	31,422,000	64,000,000
1895	2,254,760	46,610,000	55,727,000	36,445,000	72,051,000
Total	40,183,481	830,660,000	939,576,000	943,083,000	1,214,751,000
Grand total	69,196,389	1,430,410,000	1,057,641,232	1,100,449,000	1,367,401,000

Tables showing the product of gold and silver from mines of the United States since 1792 will be found in the Appendix (XXXVII, p. 226).

COINAGE OF THE UNITED STATES.

The following table exhibits the number of fine ounces and value of gold and silver coinage of the United States, by calendar years, from 1873 to 1895:

COINAGE OF GOLD AND SILVER OF THE MINTS OF THE UNITED STATES, 1873–1895.

Calendar year.	Gold.		Silver.	
	Fine ounces.	Value.	Fine ounces.	Coining value.
1873	2,758,475	$57,022,748	3,112,891	$4,024,748
1874	1,705,441	35,254,630	5,299,421	6,851,777
1875	1,594,050	32,951,940	11,870,635	15,347,893
1876	2,253,281	46,579,453	18,951,777	24,503,308
1877	2,128,493	43,999,864	21,960,246	28,393,045
1878	2,408,400	49,786,052	22,057,548	28,518,850
1879	1,890,499	39,080,080	21,323,498	27,569,776
1880	3,014,163	62,308,279	21,201,232	27,411,694
1881	4,685,162	96,850,890	21,609,970	27,940,164
1882	3,187,317	65,887,685	21,635,469	27,973,132
1883	1,414,581	29,241,990	22,620,701	29,246,968
1884	1,160,601	23,991,756	22,069,935	28,534,866
1885	1,343,519	27,773,012	22,400,433	28,962,176
1886	1,400,240	28,945,542	24,817,064	32,086,709
1887	1,159,664	23,972,383	27,218,101	35,191,081
1888	1,518,046	31,380,808	25,543,242	33,025,606
1889	1,035,899	21,413,931	27,454,465	35,496,683
1890	990,100	20,467,182	30,320,999	39,202,908
1891	1,413,614	29,222,005	21,284,115	27,518,857
1892	1,682,832	34,787,223	9,777,084	12,641,078
1893	2,757,231	56,997,020	6,808,413	8,802,797
1894	3,848,045	79,546,160	7,115,896	9,200,351
1895	2,883,941	59,616,358	4,407,055	5,698,010
Total	48,233,594	997,076,991	420,860,190	544,142,477

In the Appendix (XLVIII, p. 258) a table will be found showing the value of the coinage executed by each mint from 1792 to June 30, 1896.

WORLD'S PRODUCTION, 1893, 1894, AND 1895.

The production of gold and silver in the world for the calendar years 1893, 1894, and 1895 was as follows:

PRODUCT OF GOLD AND SILVER IN THE WORLD.

Calendar year.	Gold.	Silver.
1893	$157,494,800	$213,944,400
1894	181,567,800	212,829,600
1895	200,406,000	217,610,800

Tables compiled from information furnished by foreign governments through our diplomatic representatives and revised from the latest data, exhibiting the weight and value of the gold and silver product of the principal countries of the world for the calendar years 1893,

1894, and 1895, will be found in the Appendix (XXXIX and XL, pp. 228–230).

For the sake of uniformity, the value of silver has, as heretofore, been calculated at its coining rate, viz, $1.2929+ per fine ounce.

The following table shows the production of the precious metals in the world for the calendar years 1860–1895:

PRODUCT OF GOLD AND SILVER IN THE WORLD, 1860–1895.

[The annual production of 1860 to 1872 is obtained from 5-year period estimates, compiled by Dr. Adolph Soetbeer. Since 1872 the estimates are those of the Bureau of the Mint.]

Calendar year.	Gold.		Silver.		
	Fine ounces.	Value.	Fine ounces.	Commercial value.	Coining value.
1860	6,486,262	$134,083,000	29,095,428	$39,337,000	$37,618,000
1861	5,949,582	122,989,000	35,401,972	46,191,000	45,772,000
1862	5,949,582	122,989,000	35,401,972	47,651,000	45,772,000
1863	5,949,582	122,989,000	35,401,972	47,616,000	45,772,000
1864	5,949,582	122,989,000	35,401,972	47,616,000	45,772,000
1865	5,949,582	122,989,000	35,401,972	47,368,000	45,772,000
1866	6,270,086	129,614,000	43,051,583	57,646,000	55,663,000
1867	6,270,086	129,614,000	43,051,583	57,173,000	55,663,000
1868	6,270,086	129,614,000	43,051,583	57,086,000	55,663,000
1869	6,270,086	129,614,000	43,051,583	57,043,000	55,663,000
1870	6,270,086	129,614,000	43,051,583	57,173,000	55,663,000
1871	5,591,014	115,577,000	63,317,014	83,958,000	81,864,000
1872	5,591,014	115,577,000	63,317,014	83,705,000	81,864,000
Total	78,766,630	1,628,252,000	547,997,231	729,563,000	708,521,000
1873	4,653,675	96,200,000	63,267,187	82,120,800	81,800,000
1874	4,390,031	90,750,000	55,300,781	70,674,400	71,500,000
1875	4,716,563	97,500,000	62,261,719	77,578,100	80,500,000
1876	5,016,488	103,700,000	67,753,125	78,322,600	87,600,000
1877	5,512,196	113,947,200	62,679,916	75,278,600	81,040,700
1878	5,761,114	119,092,800	73,385,451	84,540,000	94,882,200
1879	5,262,174	108,778,800	74,383,495	83,532,700	96,172,600
1880	5,148,880	106,436,800	74,795,273	85,640,600	96,705,000
1881	4,983,742	103,023,100	79,020,872	89,925,700	102,168,400
1882	4,934,086	101,996,600	86,472,091	98,232,300	111,802,300
1883	4,614,588	95,392,000	89,175,023	98,984,300	115,297,000
1884	4,921,169	101,729,600	81,567,801	90,785,000	105,461,400
1885	5,245,572	108,435,600	91,609,959	97,518,800	118,445,200
1886	5,135,679	106,163,900	93,297,290	92,793,500	120,626,800
1887	5,116,861	105,774,900	96,123,586	94,031,000	124,281,000
1888	5,330,775	110,196,900	108,827,606	102,185,900	140,706,400
1889	5,973,790	123,489,200	120,213,611	112,414,100	155,427,700
1890	5,749,306	118,848,700	126,095,062	131,937,000	163,032,000
1891	6,320,194	130,650,000	137,170,919	135,500,200	177,352,300
1892	7,094,266	146,651,500	153,151,762	133,404,400	198,014,400
1893	7,618,811	157,494,800	165,472,621	129,119,900	213,944,400
1894	8,783,342	181,567,800	164,610,394	104,493,000	212,829,600
1895	9,694,640	200,406,000	168,308,353	110,073,700	217,610,800
Total	131,977,942	2,728,226,200	2,294,943,897	2,259,086,600	2,967,200,200
Grand total	210,744,572	4,356,478,200	2,842,941,128	2,988,649,600	3,675,721,200

The silver product is given at its commercial value, reckoned at the average market price of silver each year, as well as its coining value in United States dollars.

A table showing the product of gold and silver in the world for the calendar years 1493–1895 will be found in the Appendix (XLI, p. 232).

WORLD'S COINAGE, 1893, 1894, AND 1895.

In the Appendix will be found a table, revised from the latest information received, exhibiting the coinages of the various countries of the world during the calendar years 1893, 1894, and 1895. The following is a summary of the same:

COINAGE OF NATIONS.

Calendar year.	Gold.	Silver.
1893	$232,420,517	$137,952,690
1894	227,921,032	113,095,788
1895	231,087,438	121,610,219

The above figures represent, as nearly as this Bureau has been able to ascertain, the total value of the gold and silver coinages executed in the world during the years therein named.

It must be borne in mind, however, that the total of these coinages does not correctly represent the amount of new gold and new silver made into coins during the year, for the reason that the coinages as reported include the value of domestic and foreign coins melted for recoinage, as well as old material, plate, etc., used in coinage.

In the circular letter of inquiry prepared at this Bureau and sent to foreign governments through the Department of State, asking for information on these subjects, it was especially requested that each country report the amount of such recoinages. This has been done in many instances, but not in all.

The following table exhibits the number of fine ounces and value of gold and silver coinage of the world, by calendar years, from 1873 to 1895:

COINAGE OF GOLD AND SILVER OF THE MINTS OF THE WORLD FOR THE CALENDAR YEARS 1873–1895.

Calendar year.	Gold.		Silver.	
	Fine ounces.	Value.	Fine ounces.	Coining value.
1873	12,462,890	$257,630,802	101,741,421	$131,544,464
1874	6,568,279	135,778,387	79,610,875	102,931,232
1875	9,480,892	195,987,428	92,747,118	119,915,467
1876	10,309,645	213,119,278	97,899,525	126,577,164
1877	9,753,196	201,616,466	88,449,796	114,359,332
1878	9,113,202	188,386,611	124,671,870	161,191,913
1879	4,390,167	90,752,811	81,124,555	104,888,313
1880	7,242,951	149,725,081	65,442,074	84,611,974
1881	7,111,864	147,015,275	83,539,051	108,010,086
1882	4,822,851	99,697,170	85,685,996	110,785,934
1883	5,071,882	104,845,114	84,541,904	109,306,705
1884	4,810,061	99,432,795	74,120,127	95,832,084
1885	4,632,273	95,757,582	98,044,475	126,764,574
1886	4,578,310	94,642,070	96,566,844	124,854,101
1887	6,046,510	124,992,465	126,388,502	163,411,397
1888	6,522,346	134,828,855	104,354,000	134,922,344
1889	8,170,611	168,901,519	107,788,256	139,362,595
1890	7,219,725	149,244,965	117,789,228	152,293,144
1891	5,782,463	119,534,122	106,962,049	138,294,367
1892	8,343,387	172,473,124	120,282,947	155,517,347
1893	11,243,342	232,420,517	106,697,783	137,952,690
1894	11,025,680	227,921,032	87,472,523	113,095,788
1895	11,178,855	231,087,438	94,057,903	121,610,219
Total	175,881,382	3,635,790,907	2,225,978,822	2,878,033,234

WORLD'S COINAGE, 1893, 1894, AND 1895.

In the Appendix (XXXVIII, p. 227) will be found a table, revised from the latest information received, exhibiting the coinages of the various countries of the world during the calendar years 1893, 1894, and 1895.

FOREIGN COINS MELTED BY CERTAIN COUNTRIES.

Foreign gold and silver coins melted by the various countries of the world during the calendar years 1894 and 1895, so far as has been reported to this Bureau, are exhibited in the table following.

FOREIGN GOLD AND SILVER COINS MELTED BY CERTAIN COUNTRIES, CALENDAR YEARS 1894 AND 1895.

[Value expressed in United States money.]

Country.	1894.		1895.	
	Gold.	Silver.	Gold.	Silver.
United States	$1,793,592	$21,576	$1,172,663	$73,467
Austria-Hungary	12,548,120	540	15,556,130	2,446
Chile			5,121,931	
Germany	7,331,224		12,837,156	
Netherlands			55,826	
Russia			548	
Spain		193,940		
Switzerland		32,810		
Siam		2,291,194		2,589,823
Turkey			3,376,756	
Total	21,672,936	2,540,060	38,121,010	2,665,736

RECOINAGES BY THE WORLD.

The following table, compiled from official sources, exhibits, approximately, the recoinages of gold and silver of the principal countries of the world for the calendar years 1894 and 1895, so far as the same have been reported to this Bureau:

GOLD AND SILVER RECOINAGES REPORTED BY THE PRINCIPAL COUNTRIES OF THE WORLD DURING THE CALENDAR YEARS 1894 AND 1895.

[Value expressed in United States money.]

Country.	1894.		1895.	
	Gold.	Silver.	Gold.	Silver.
United States	$1,288,346	$5,799,541	$1,098,901	$3,497,374
Australia	327,559			
Austria-Hungary	2,085,947	4,816,837	387,498	3,316,209
France	1,508,088	772,000	672,244	
Great Britain	17,519,400	1,896,850	11,679,600	2,160,731
Germany	42,108	1,067,945	69,479	1,826,038
Guatemala		189,656		
India (British)		1,117,099		484,548
Japan		4,158		1,594
Netherlands		109,746	434	
Norway		15,946		10,854
Russia		213,930	3,596	488,948
Spain		1,737,000		138,078
Switzerland				44,390
Sweden	287	1,066		
Turkey	84,403	446,634	43,960	414,483
Total	22,856,138	18,188,408	13,955,712	12,383,247

VALUE OF FOREIGN COINS.

The law requires:

That the value of the foreign coins as expressed in the money of account of the United States shall be that of the pure metal of such coin of standard value; and the values of the standard coins in circulation of the various nations of the world shall be estimated quarterly by the Director of the Mint and be proclaimed by the Secretary of the Treasury immediately after the passage of this act and thereafter quarterly on the 1st day of January, April, July, and October in each year.

In accordance with the above requirement, the values of foreign coins have been estimated and proclaimed as follows:

VALUE OF FOREIGN COINS JANUARY 1, 1896.

Country.	Standard.	Monetary unit.	Value in terms of United States gold dollar.	Coins.
Argentina	Gold and silver.	Peso	$0.96,5	Gold: argentine ($4.82,4) and ½ argentine. Silver: peso and divisions.
Austria-Hungary	Gold	Crown	.20,3	Gold: former system—4 florins ($1.92,9), 8 florins ($3.85,8), ducat ($2.28,7) and 4 ducats ($9.15,8). Silver: 1 and 2 florins. Gold: present system—20 crowns ($4.05,2); 10 crowns ($2.02,6).
Belgium	Gold and silver.	Franc	.19,3	Gold: 10 and 20 francs. Silver: 5 francs.
Bolivia	Silver	Boliviano	.49,1	Silver: boliviano and divisions.
Brazil	Gold	Milreis	.54,6	Gold: 5, 10, and 20 milreis. Silver: ½, 1, and 2 milreis.
British Possessions N. A. (except Newfoundland).	do	Dollar	1.00	
Central American States: Costa Rica, Guatemala, Honduras, Nicaragua, Salvador	Silver	Peso	.49,1	Silver: peso and divisions.
Chile	Gold and silver.	do	.91,2	Gold: escudo ($1.82,4), doubloon ($4.56,1), and condor ($9.12,3). Silver: peso and divisions.
China	Silver	Tael. Shanghai	.72,5	
		Haikwan (customs).	.80,8	
		Tientsin	.76,9	
		Chefoo	.75,9	
Colombia	do	Peso	.49,1	Gold: condor ($9.64,7) and double condor. Silver: peso.
Cuba	Gold and silver.	do	.92,6	Gold: doubloon ($5.01,7). Silver: peso.
Denmark	Gold	Crown	.26,8	Gold: 10 and 20 crowns.

VALUE OF FOREIGN COINS JANUARY 1, 1896—Continued.

Country.	Standard.	Monetary unit.	Value in terms of United States gold dollar.	Coins.
Ecuador	Silver	Sucre	$0.49,1	Gold: condor ($9.64,7) and double condor. Silver: sucre and divisions.
Egypt	Gold	Pound (100 piasters).	4.94,3	Gold: pound (100 piasters), 5, 10, 20, and 50 piasters. Silver: 1, 2, 5, 10, and 20 piasters.
Finland	do	Mark	.19,3	Gold: 20 marks ($3.85,9), 10 marks ($1.93).
France	Gold and silver.	Franc	.19,3	Gold: 5, 10, 20, 50, and 100 francs. Silver: 5 francs.
German Empire	Gold	Mark	.23,8	Gold: 5, 10, and 20 marks.
Great Britain	do	Pound sterling	4.86,6½	Gold: sovereign (pound sterling) and ½ sovereign.
Greece	Gold and silver.	Drachma	.19,3	Gold: 5, 10, 20, 50, and 100 drachmas. Silver: 5 drachmas.
Haiti	do	Gourde	.96,5	Silver: gourde.
India	Silver	Rupee	.23,3	Gold: mohur ($7.10,5). Silver: rupee and divisions.
Italy	Gold and silver.	Lira	.19,3	Gold: 5, 10, 20, 50, and 100 lire. Silver: 5 lire.
Japan	do. *a*	Yen (Gold)	.99,7	Gold: 1, 2, 5, 10, and 20 yen.
		Yen (Silver)	.52,9	Silver: yen.
Liberia	Gold	Dollar	1.00	
Mexico	Silver	do	.53,3	Gold: dollar ($0.98,3), 2½, 5, 10, and 20 dollars. Silver: dollar (or peso) and divisions.
Netherlands	Gold and silver.	Florin	.40,2	Gold: 10 florins. Silver: ½, 1, and 2½ florins.
Newfoundland	Gold	Dollar	1.01,4	Gold: 2 dollars ($2.02,7).
Norway	do	Crown	.26,8	Gold: 10 and 20 crowns.
Persia	Silver	Kran	.09	Gold: ½, 1, and 2 tomans ($3.40,9). Silver: ¼, ½, 1, 2, and 5 krans.
Peru	do	Sol	.49,1	Silver: sol and divisions.
Portugal	Gold	Milreis	1.08	Gold: 1, 2, 5, and 10 milreis.
Russia	Silver *b*	Ruble (Gold)	.77,2	Gold: imperial ($7.71,8), and ½ imperial *c* ($3.86).
		Ruble (Silver)	.39,3	Silver: ¼, ½, and 1 ruble.
Spain	Gold and silver.	Peseta	.19,3	Gold: 25 pesetas. Silver: 5 pesetas.
Sweden	Gold	Crown	.26,8	Gold: 10 and 20 crowns.
Switzerland	Gold and silver.	Franc	.19,3	Gold: 5, 10, 20, 50, and 100 francs. Silver: 5 francs.
Tripoli	Silver	Mahbub of 20 piasters.	.44,3	
Turkey	Gold	Piaster	.04,4	Gold: 25, 50, 100, 250, and 500 piasters.
Venezuela	Gold and silver.	Bolivar	.19,3	Gold: 5, 10, 20, 50, and 100 bolivars. Silver: 5 bolivars.

a Gold the nominal standard. Silver practically the standard.

b Silver the nominal standard. Paper the actual currency, the depreciation of which is measured by the gold standard.

c Coined since January 1, 1886. Old half imperial = $3.98,6.

VALUE OF FOREIGN COINS APRIL 1, 1896.

Country.	Standard.	Monetary unit.	Value in terms of United States gold dollar.	Coins.
Argentina	Gold and silver.	Peso	$0.96,5	Gold: argentine ($4.82,4) and ½ argentine. Silver: peso and divisions.
Austria-Hungary	Gold	Crown	.20,3	Gold: former system—4 florins ($1.92,9), 8 florins ($3.85,8), ducat ($2.28,7) and 4 ducats ($9.14,9). Silver: 1 and 2 florins. Gold: present system—20 crowns ($4.05,2), 10 crowns ($2.02.6).
Belgium	Gold and silver.	Franc	.19,3	Gold: 10 and 20 francs. Silver: 5 francs.
Bolivia	Silver	Boliviano	.49,3	Silver: boliviano and divisions.
Brazil	Gold	Milreis	.54,6	Gold: 5, 10, and 20 milreis. Silver: ½, 1, and 2 milreis.
British Possessions N. A. (except Newfoundland).	do	Dollar	1.00	
Central American States— Costa Rica, Guatemala, Honduras, Nicaragua, Salvador	Silver	Peso	.49,3	Silver: peso and divisions.
Chile	Gold and silver.	do	.91,2	Gold: escudo ($1.82,4), doubloon ($4.56,1), and condor ($9.12,3). Silver: peso and divisions.
China	Silver	Tael. Shanghai	.72,9	
		Haikwan (customs)	.81,2	
		Tientsin	.77,3	
		Cheefoo	.76,3	
Colombia	do	Peso	.49,3	Gold: condor ($9.64,7), and double condor. Silver: peso.
Cuba	Gold and silver.	do	.92,6	Gold: doubloon ($5.01,7). Silver: peso.
Denmark	Gold	Crown	.26,8	Gold: 10 and 20 crowns.
Ecuador	Silver	Sucre	.49,3	Gold: condor ($9.64,7) and double condor. Silver: sucre and divisions.
Egypt	Gold	Pound (100 piasters).	4.94,3	Gold: pound (100 piasters), 5, 10, 20, and 50 piasters. Silver: 1, 2, 5, 10, and 20 piasters.
Finland	do	Mark	.19,3	Gold: 20 marks ($3.85,9), 10 marks ($1.93).
France	Gold and silver.	Franc	.19,3	Gold: 5, 10, 20, 50, and 100 francs. Silver: 5 francs.
German Empire	Gold	Mark	.23,8	Gold: 5, 10, and 20 marks.
Great Britain	do	Pound sterling	4.86,6½	Gold: sovereign (pound sterling) and ½ sovereign.

VALUE OF FOREIGN COINS APRIL 1, 1896—Continued.

Country.	Standard.	Monetary unit.	Value in terms of United States gold dollar.	Coins.
Greece	Gold and silver.	Drachma	$0.19,3	Gold: 5, 10, 20, 50, and 100 drachmas. Silver: 5 drachmas.
Haiti	do	Gourde	.96,5	Silver: gourde.
India	Silver	Rupee	.23,4	Gold: mohur ($7.10,5). Silver: rupee and divisions.
Italy	Gold and silver.	Lira	.19.3	Gold: 5, 10, 20, 50, and 100 lire. Silver: 5 lire.
Japan	do. *a*	Yen Gold	.99,7	Gold: 1, 2, 5, 10, and 20 yen.
		Yen Silver	.53,2	Silver: yen.
Liberia	Gold	Dollar	1.00	
Mexico	Silver	do	.53,6	Gold: dollar ($0.98,3), 2½, 5, 10, and 20 dollars. Silver: dollar (or peso) and divisions.
Netherlands	Gold and silver.	Florin	.40,2	Gold: 10 florins. Silver: ½, 1, and 2½ florins.
Newfoundland	Gold	Dollar	1.01,4	Gold: 2 dollars ($2.02,7).
Norway	do	Crown	.26,8	Gold: 10 and 20 crowns.
Persia	Silver	Kran	.09,1	Gold: ½, 1, and 2 tomans ($3.40,9). Silver: ¼, ½, 1, 2, and 5 krans.
Peru	do	Sol	.49,3	Silver: sol and divisions.
Portugal	Gold	Milreis	1.08	Gold: 1, 2, 5, and 10 milreis.
Russia	Silver *b*	Ruble Gold	.77,2	Gold: imperial ($7.71,8), and ½ imperial *c* ($3.86).
		Ruble Silver	.39,5	Silver: ¼, ½, and 1 ruble.
Spain	Gold and silver.	Peseta	.19,3	Gold: 25 pesetas. Silver: 5 pesetas.
Sweden	Gold	Crown	.26,8	Gold: 10 and 20 crowns.
Switzerland	Gold and silver.	Franc	.19,3	Gold: 5, 10, 20, 50, and 100 francs. Silver: 5 francs.
Tripoli	Silver	Mahbub of 20 piasters.	.44,5	
Turkey	Gold	Piaster	.04,4	Gold: 25, 50, 100, 250, and 500 piasters.
Venezuela	Gold and silver.	Bolivar	.19,3	Gold: 5, 10, 20, 50, and 100 bolivars. Silver: 5 bolivars.

a Gold the nominal standard. Silver practically the standard.

b Silver the nominal standard. Paper the actual currency, the depreciation of which is measured by the gold standard.

c Coined since January 1, 1886. Old half-imperial = $3.98,6.

VALUE OF FOREIGN COINS JULY 1, 1896.

Country.	Standard.	Monetary unit.	Value in terms of United States gold dollar.	Coins.
Argentina	Gold and silver.	Peso	$0.965	Gold: argentine ($4.824) and ½ argentine. Silver: peso and divisions.
Austria-Hungary	Gold	Crown	.203	Gold: former system—4 florins ($1.929), 8 florins ($3.858), ducat ($2.287), and 4 ducats ($9.149). Silver: 1 and 2 florins. Gold: present system—20 crowns ($4.052); 10 crowns ($2.026).
Belgium	Gold and silver.	Franc	.193	Gold: 10 and 20 francs. Silver: 5 francs.
Bolivia	Silver	Boliviano	.497	Silver: boliviano and divisions.
Brazil	Gold	Milreis	.546	Gold: 5, 10, and 20 milreis. Silver: ½, 1, and 2 milreis.
British Possessions N. A. (except Newfoundland).	do	Dollar	1.00	
Central American States— Costa Rica, Guatemala, Honduras, Nicaragua, Salvador	Silver	Peso	.497	Silver: peso and divisions.
Chile	Gold	do	.365	Gold: escudo ($1.825), doubloon, ($3.650), and condor ($7.300). Silver: peso and divisions.
China	Silver	Tael. Amoy	.805	
		Canton	.802	
		Chefoo	.769	
		Chin Kiang	.786	
		Fuchau	.744	
		Haikwan (customs).	.819	
		Hankow	.753	
		Hongkong	(a)	
		Niuchwang	.755	
		Ningpo	.774	
		Shanghai	.735	
		Swatow	.743	
		Takao	.810	
		Tientsin	.780	
Colombia	do	Peso	.497	Gold: condor ($9.647) and double condor. Silver: peso.
Cuba	Gold and silver.	do	.926	Gold: doubloon ($5.017). Silver: peso.
Denmark	Gold	Crown	.268	Gold: 10 and 20 crowns.
Ecuador	Silver	Sucre	.497	Gold: condor ($9.647) and double condor. Silver: sucre and divisions.

a The "British dollar" has the same legal value as the Mexican dollar in Hongkong, the Straits Settlements, and Labuan.

VALUE OF FOREIGN COINS JULY 1, 1896—Continued.

Country.	Standard.	Monetary unit.	Value in terms of United States gold dollar.	Coins.
Egypt	Gold	Pound (100 piasters).	$4.943	Gold: pound (100 piasters), 5, 10, 20, and 50 piasters. Silver: 1, 2, 5, 10, and 20 piasters.
Finland	do	Mark	.193	Gold: 20 marks ($3.859), 10 marks ($1.93).
France	Gold and silver.	Franc	.193	Gold: 5, 10, 20, 50, and 100 francs. Silver: 5 francs.
German Empire	Gold	Mark	.238	Gold: 5, 10, and 20 marks.
Great Britain	do	Pound sterling	4.866½	Gold: sovereign (pound sterling) and ½ sovereign.
Greece	Gold and silver.	Drachma	.193	Gold: 5, 10, 20, 50, and 100 drachmas. Silver: 5 drachmas.
Haiti	do	Gourde	.965	Silver: gourde.
India	Silver	Rupee	.236	Gold: mohur ($7.105). Silver: rupee and divisions.
Italy	Gold and silver.	Lira	.193	Gold: 5, 10, 20, 50, and 100 lire. Silver: 5 lire.
Japan	do. *a*	Yen (Gold)	.997	Gold: 1, 2, 5, 10, and 20 yen.
		Yen (Silver)	.536	Silver: yen.
Liberia	Gold	Dollar	1.00	
Mexico	Silver	do	.540	Gold: dollar ($0.983), 2½, 5, 10, and 20 dollars. Silver: dollar (or peso) and divisions.
Netherlands	Gold and silver.	Florin	.402	Gold: 10 florins. Silver: ½, 1, and 2½ florins.
Newfoundland	Gold	Dollar	1.014	Gold: 2 dollars ($2.027).
Norway	do	Crown	.268	Gold: 10 and 20 crowns.
Persia	Silver	Kran	.092	Gold: ½, 1, and 2 tomans ($3.409). Silver: ¼, ½, 1, 2, and 5 krans.
Peru	do	Sol	.497	Silver: sol and divisions.
Portugal	Gold	Milreis	1.080	Gold: 1, 2, 5, and 10 milreis.
Russia	Silver *b*	Ruble (Gold)	.772	Gold: imperial ($7.718), and ½ imperial *c* ($3.86).
		Ruble (Silver)	.398	Silver: ¼, ½, and 1 ruble.
Spain	Gold and silver.	Peseta	.193	Gold: 25 pesetas. Silver: 5 pesetas.
Sweden	Gold	Crown	.268	Gold: 10 and 20 crowns.
Switzerland	Gold and silver.	Franc	.193	Gold: 5, 10, 20, 50, and 100 francs. Silver: 5 francs.
Tripoli	Silver	Mahbub of 20 piasters	.449	
Turkey	Gold	Piaster	.044	Gold: 25, 50, 100, 250, and 500 piasters.
Venezuela	Gold and silver.	Bolivar	.193	Gold: 5, 10, 20, 50, and 100 bolivars. Silver: 5 bolivars.

a Gold the nominal standard. Silver practically the standard.

b Silver the nominal standard. Paper the actual currency, the depreciation of which is measured by the gold standard.

c Coined since January 1, 1886. Old half-imperial=$3.986.

VALUE OF FOREIGN COINS OCTOBER 1, 1896.

Country.	Standard.	Monetary unit.	Value in terms of United States gold dollar.	Coins.
Argentina	Gold and silver.	Peso	$0.965	Gold: argentine ($4.824) and ½ argentine. Silver: peso and divisions.
Austria-Hungary	Gold	Crown	.203	Gold: former system—4 florins ($1.929), 8 florins ($3.858), ducat ($2.287), and 4 ducats ($9.149). Silver: 1 and 2 florins. Gold: present system—20 crowns ($4.052), 10 crowns ($2.026).
Belgium	Gold and silver.	Franc	.193	Gold: 10 and 20 francs. Silver: 5 francs.
Bolivia	Silver	Boliviano	.490	Silver: boliviano and divisions.
Brazil	Gold	Milreis	.546	Gold: 5, 10, and 20 milreis. Silver: ½, 1, and 2 milreis.
British possessions N. A. (except Newfoundland).	do	Dollar	1.00	
Central American States: Costa Rica, Guatemala, Honduras, Nicaragua, Salvador	Silver	Peso	.490	Silver: peso and divisions.
Chile	Gold	do	.365	Gold: escudo ($1.825), doubloon ($3.650), and condor ($7.300). Silver: peso and divisions.
China	Silver	Tael. Amoy	.793	
		Canton	.790	
		Chefoo	.758	
		Chin Kiang	.774	
		Fuchau	.733	
		Haikwan (customs).	.806	
		Hankow	.742	
		Hongkong.	(a)	
		Niuchwang	.743	
		Ningpo	.762	
		Shanghai	.724	
		Swatow	.732	
		Takao	.798	
		Tientsin	.768	
Colombia	do	Peso	.490	Gold: condor ($9.647) and double condor. Silver: peso.
Cuba	Gold and silver.	do	.926	Gold: doubloon ($5.017). Silver: peso.
Denmark	Gold	Crown	.268	Gold: 10 and 20 crowns.
Ecuador	Silver	Sucre	.490	Gold: condor ($9.647) and double condor. Silver: Sucre and divisions.

a The "British dollar" has the same legal value as the Mexican dollar in Hongkong, the Straits Settlements, and Labuan.

VALUE OF FOREIGN COINS OCTOBER 1, 1896—Continued.

Country.	Standard.	Monetary unit.	Value in terms of United States gold dollar.	Coins.
Egypt	Gold	Pound (100 piasters).	$4.943	Gold: pound (100 piasters), 5, 10, 20, and 50 piasters. Silver: 1, 2, 5, 10, and 20 piasters.
Finland	do	Mark	.193	Gold: 20 marks ($3.859), 10 marks ($1.93).
France	Gold and silver.	Franc	.193	Gold: 5, 10, 20, 50, and 100 francs. Silver: 5 francs.
German Empire	Gold	Mark	.238	Gold: 5, 10, and 20 marks.
Great Britain	do	Pound sterling	4.866½	Gold: sovereign (pound sterling) and ½ sovereign.
Greece	Gold and silver.	Drachma	.193	Gold: 5, 10, 20, 50, and 100 drachmas. Silver: 5 drachmas.
Haiti	do	Gourde	.965	Silver: gourde.
India	Silver	Rupee	.233	Gold: mohur ($7.105). Silver: rupee and divisions.
Italy	Gold and silver.	Lira	.193	Gold: 5, 10, 20, 50, and 100 lire. Silver: 5 lire.
Japan	do. *a*	Yen (Gold)	.997	Gold: 1, 2, 5, 10, and 20 yen.
		Yen (Silver)	.528	Silver: yen.
Liberia	Gold	Dollar	1.00	
Mexico	Silver	do	.532	Gold: dollar ($0.983), 2½, 5, 10, and 20 dollars. Silver: dollar (or peso) and divisions.
Netherlands	Gold and silver.	Florin	.402	Gold: 10 florins. Silver: ½, 1, and 2½ florins.
Newfoundland	Gold	Dollar	1.014	Gold: 2 dollars ($2.027).
Norway	do	Crown	.268	Gold: 10 and 20 crowns.
Persia	Silver	Kran	.090	Gold: ½, 1, and 2 tomans ($3.409). Silver: ¼, ½, 1, 2, and 5 krans.
Peru	do	Sol	.490	Silver: sol and divisions.
Portugal	Gold	Milreis	1.080	Gold: 1, 2, 5, and 10 milreis.
Russia	Silver *b*	Ruble (Gold)	.772	Gold: imperial ($7.718) and ½ imperial *c* ($3.86).
		Ruble (Silver)	.392	Silver: ¼, ½, and 1 ruble.
Spain	Gold and silver.	Peseta	.193	Gold: 25 pesetas. Silver: 5 pesetas.
Sweden	Gold	Crown	.268	Gold: 10 and 20 crowns.
Switzerland	Gold and silver.	Franc	.193	Gold: 5, 10, 20, 50, and 100 francs. Silver: 5 francs.
Tripoli	Silver	Mahbub of 20 piasters.	.442	
Turkey	Gold	Piaster	.044	Gold: 25, 50, 100, 250, and 500 piasters.
Venezuela	Gold and silver.	Bolivar	.193	Gold: 5, 10, 20, 50, and 100 bolivars. Silver: 5 bolivars.

a Gold the nominal standard. Silver practically the standard.

b Silver the nominal standard. Paper the actual currency, the depreciation of which is measured by the gold standard.

c Coined since January 1, 1886. Old half-imperial = $3.986.

Tables in the Appendix (XLIII, p. 242) will be found showing changes in value of foreign coins from January 1, 1880, to October, 1896.

ASSAY LABORATORY OF THE BUREAU OF THE MINT.

During the calendar year 1895 there were tested by the assayer of the Bureau 440 gold coins and 536 silver coins, all of which were found to be within the legal requirements as to weight and fineness, the greatest deviation above the standard being 2.2, while the greatest deviation below was 1.4.

During the past year the proof gold prepared under the direction of the Bureau has been supplied to the assay offices with great satisfaction, the results obtained on shipments of bullion having been more uniform than when each institution prepared its own proof gold.

In the past year several counterfeit silver coins were examined for the Secret Service. These pieces were of much interest, as they are struck from an alloy closely approaching our standard, varying from 867.5 to 940 in fineness. The alloy in every case was copper.

The following table shows the number of pieces assayed at the Bureau each month and their average fineness; also the total number assayed from each mint, with the average fineness for the year:

NUMBER AND AVERAGE FINENESS OF GOLD AND SILVER COINS OF THE UNITED STATES TESTED AT THE BUREAU OF THE MINT DURING THE YEAR 1895.

Months.	San Francisco.				New Orleans.				Philadelphia.			
	Number of pieces.		Average fineness.		Number of pieces.		Average fineness.		Number of pieces.		Average fineness.	
	Gold.	Silver.	Gold.	Silver.	Gold.	Silver.	Gold.	Silver.	Gold.	Silver.	Gold.	Silver.
1895.												
January	14	18	899.97	900.16	4	28	900	899.73	18	8	899.90	899.95
February	16	20	900	899.90	8	20	900.07	900.09	24	2	900.03	902.20
March	8	18	899.94	900.23	4	36	900.15	900.33	4	4	899.95	901
April	8	24	899.89	899.70	4	26	900	899.89	22	10	900.05	900.25
May	14	24	899.99	900.14	2	26	900.20	899.72	22	2	900.02	899.60
June	10	12	899.97	899.32	4	.....	899.98	.....	.....	24	.....	900.30
July	18	.....	899.89	.....	.....	14	.....	899.13	10	18	900.05	899.91
August	20	.....	899.93	.....	.....	26	.....	899.50	22	40	899.98	900.05
September	20	.....	899.95	.....	.....	24	.....	899.30	28	22	900	899.91
October	20	4	899.95	899.60	.....	28	.....	899.05	24	32	899.99	899.74
November	22	4	899.86	899.30	.....	.....	.....	.....	22	12	899.94	899.54
December	22	2	899.84	898.60	.....	.....	.....	.....	26	8	899.94	899.90
Average	16	10.5	899.93	899.66	2.1	19	900.06	899.64	18.5	15.1	899.99	899.93
Total	192	126	.....	.....	26	228	.....	.....	222	182	.....	.....

The work of the Annual Assay Commission is given in a similar table:

NUMBER AND AVERAGE FINENESS OF GOLD AND SILVER COINS OF THE UNITED STATES TESTED BY THE ANNUAL ASSAY COMMISSION OF 1895.

Months.	San Francisco.				New Orleans.				Philadelphia.			
	Number of pieces.		Average fineness.		Number of pieces.		Average fineness.		Number of pieces.		Average fineness.	
	Gold.	Silver.	Gold.	Silver.	Gold.	Silver.	Gold.	Silver.	Gold.	Silver.	Gold.	Silver.
1895.												
January	2	2	899.75	900.65	2	2	899.90	899	4	2	899.30	900.30
February	2	2	899.75	900.45	2	2	899.95	899.55	2	2	899.30	900
March	2	2	899.85	900.80	2	2	899.75	900.60	1	2	899.90	900.10
April	2	2	899.80	899.75	2	2	899.90	899.45	2	2	900	900
May	2	2	899.80	901.70	2	2	899.95	899.80	2	2	899.85	899.20
June	.....	2	.....	900.45	2	.....	900.05	.....	.....	2	.....	900.40
July	2	.....	899.65	.....	.....	2	.....	898.85	2	2	900	900.80
August	2	.....	899.90	.....	.....	2	.....	899.55	2	2	899.09	899.75
September	2	.....	899.80	.....	.....	2	.....	899.10	3	2	899.93	900.20
October	2	2	899.80	901.55	.....	2	.....	899	2	2	899.85	900.55
November	2	2	899.80	900.35	.....	.....	.....	.....	2	2	899.80	900.75
December	2	2	899.85	899.25	.....	.....	.....	.....	2	2	899.85	900.45
Average	1.83	1.5	899.80	900.55	1	1.5	899.94	899.44	2	2	899.67	900.20
Total	22	18	.....	.....	12	18	.....	.....	24	24	.....	.....
Mass melt	43	100	899.80	900	28	68	899.90	899.60	95	130	899.80	899.50

PROCEEDINGS OF THE ASSAY COMMISSION OF 1896.

The following Commissioners were appointed by the President, under the provisions of section 3547 of the Revised Statutes, to test the weight and fineness of the gold and silver coins of the coinage of the calendar year 1895 reserved for that purpose by the coinage mints, viz: Hon. O. H. Platt, Finance Committee, United States Senate; Hon. Charles W. Stone, Committee on Coinage, Weights, and Measures, House of Representatives; Prof. Thomas M. Drown, Lehigh University, Pennsylvania; Henry Burnett, esq., Paducah, Ky.; Edward O. Leech, esq., New York; Prof. John W. Mallet, University of Virginia; Prof. Marcus Benjamin, New York; Eugene B. Braden, esq., Helena, Mont.; Andrew Stevenson, esq., Columbus, Ohio; Cabell Whitehead, esq., District of Columbia; John Cadwalader, esq., Philadelphia, Pa.; Charles H. Banes, esq., Philadelphia, Pa.; Douglas H. Thomas, esq., Baltimore, Md.; Prof. William P. Mason, Troy, N. Y.; Hon. W. W. Duffield, District of Columbia; Hon. George F. Baer, Reading, Pa.

The Commission met at Philadelphia on February 12, 1896, together with the following ex officio Commissioners: James H. Eckels, esq., Comptroller of the Currency, and Herbert G. Torrey, assayer of the United States assay office, New York.

The committee on counting reported:

The packages containing the pieces reserved by the several mints for the trial of coins, in accordance with section 3539, Revised Statutes, were delivered to us by the superintendent of the mint at Philadelphia.

The number of coins corresponded with the record kept by the Director of the Mint of all transcripts sent him by the several superintendents.

The quantities of coin reserved at the several mints for the purposes of the Commission were as follows:

Mints.	Pieces.	Value.
GOLD.		
Philadelphia	3,088	$35,475.00
San Francisco	1,309	23,985.00
New Orleans	100	1,000.00
Total	4,497	60,460.00
SILVER.		
Philadelphia	3,505	1,061.90
San Francisco	2,198	754.25
New Orleans	2,736	1,040.50
Total	8,439	2,856.65
Total pieces and value	12,936	63,316.65

The committee on assaying reported:

In compliance with section 3547 of the Revised Statutes, we have taken samples of the coins reserved from time to time at the United States mints at Philadelphia, San Francisco, and New Orleans for assay.

These samples represent the various deliveries made by the coiners to the superintendents of the several mints during the calendar year 1895.

The results of the assays made of the individual coins, and of the same in mass, are given in the following schedules.

From these it will be seen that the greatest excess in the assay value of the gold coinage, as tested, above standard at the different mints (the limit of tolerance being one-thousandth) is, at—

Philadelphia	900.1
San Francisco	900
New Orleans	900.1

The greatest deficiency below standard (the limit of tolerance being one-thousandth) is, at—

Philadelphia	899.8
San Francisco	899.6
New Orleans	899.7

The greatest excess in silver coins above standard (the limit of tolerance being three-thousandths) is, at—

Philadelphia	901.1
San Francisco	902.5
New Orleans	901.6

The greatest deficiency below standard (the limit of tolerance being three-thousandths) is, at—

Philadelphia	899.1
San Francisco	899.1
New Orleans	898.2

The assay committee also tested the quartation of silver and the lead used in the assay of gold bullion and found them free from gold.

The acid used in the humid assay of silver was found to be free from silver, and also from chlorine.

The balances were also tested and found to be correct.

The committee therefore deem the assays exhibited in the accompanying schedules to be trustworthy.

The committee on counting reported:

The packages containing the pieces reserved by the several mints for the trial of coins, in accordance with section 3539, Revised Statutes, were delivered to us by the superintendent of the mint at Philadelphia.

The number of coins corresponded with the record kept by the Director of the Mint of all transcripts sent him by the several superintendents.

The quantities of coin reserved at the several mints for the purposes of the commission were as follows:

(1) Gold coins from the mint at Philadelphia, 3,088 in number, of the value of $35,475.

(2) Silver coins from the mint at Philadelphia, 3,505 in number, of the value of $1,061.90.

(3) Gold coins from the mint at San Francisco, 1,309 in number, of the value of $23,985.

(4) Silver coins from the mint at San Francisco, 2,198 in number, of the value of $754.25.

(5) Gold coins from the mint at New Orleans, 100 in number, of the value of $1,000.

(6) Silver coins from the mint at New Orleans, 2,736 in number, of the value of $1,040.50.

In all, 12,936 coins, of the aggregate value of $63,316.65, as set forth in detail on a subsequent page.

The verification of the number of coins being completed, the committee on weighing and assaying each selected such coins as were required.

In the report of those committees will be found an account of the disposition of these coins.

The committee on weighing reported—

That they have examined sample coins, selected at random from those reserved by the several mints, as follows:

MINT AT PHILADELPHIA.

119 gold coins, of which 95 were weighed in mass.
154 silver coins, of which 130 were weighed in mass.

MINT AT SAN FRANCISCO.

65 gold coins, of which 43 were weighed in mass.
118 silver coins, of which 100 were weighed in mass.

MINT AT NEW ORLEANS.

40 gold coins, of which 28 were weighed in mass.
86 silver coins, of which 68 were weighed in mass.

The weighing of the single pieces was made with a balance by Troemner, of Philadelphia, and the weights employed were provided by the Director of the Mint, who stated to the committee that the same were of the true standard of value as fixed by law, and that they had been carefully examined by the United States superintendent of weights and measures, and were correctly related to the troy pound of 1827.

The mass weighings were made upon the large Saxton balance of the mint.

The committee examined the weights ordinarily employed in the mint, and found them to be in accordance with the usual interpretation of the standard prescribed by law.

The details of the weighings, as shown in the following tables, indicate but slight deviation from the statutory standard weight, and the coins were all within the legal tolerance.

The committee on weighing pronounces the examination of the weights of the coinage of the several mints during the year 1895 to be satisfactory.

The result of the annual test is contained in the following resolution adopted by the commission:

Resolved, That the assay commission, having examined and tested the reserved coins of the several mints of the United States for the year 1895, and it appearing that these coins do not differ from the standard fineness and weight by a greater quantity than is allowed by law, the trial is considered and hereby reported satisfactory and adopted unanimously.

NOTE.—The Director of the Mint exhibited to the assay commissioners a duplicate in brass of the original troy pound made in London in 1827 and procured for the use of the mint through the United States minister. England in 1758 appointed a commission to establish a unit of weight, and the copy now in the possession of the mint is the exact duplication of the original weight of 5,760 grains, established by that commission and reasserted by the commission of 1838. The weight is kept in a strong box, locked with two keys, one of which remains with the Director of the Mint at Washington and the other in the custody of the superintendent of the mint at Philadelphia.

The committee on weighing of the assay commission used this weight to compare the accuracy of the working copies of the weight used in the mint.

MINT OF THE UNITED STATES AT PHILADELPHIA.

The number of deposits of gold and silver, including redeposits, at the mint at Philadelphia during the fiscal year ended June 30, 1896, aggregated 4,559.

The weight and value of gold and silver deposited during the year were as follows:

Metal.	Standard ounces.	Value.
Gold	1,652,949.939	$30,752,557.00
Silver	2,010,459.47	2,339,443.75
Total value		33,092,000.75

The weight and coining value of domestic gold and silver coin included in the deposits were as follows:

Metal.	Standard ounces.	Coining value.
Gold	59,745.645	$1,111,546.88
Silver	1,813,136.26	2,109,831.28

The weight and value of bars manufactured were as follows:

Metal.	Standard ounces.	Coining value.
Gold	155,635.619	$2,895,546.40
Silver	52,388.17	60,960.78
Total value		2,956,507.18

During the year there were transferred from the Treasury for recoinage 44,013.190 standard ounces of uncurrent domestic gold coin, of the value of $818,850.04 in new full-weight coins, and 1,811,542.35 standard ounces of worn and uncurrent domestic silver coins, of the value of $2,253,862.95 in new subsidiary coins.

The denominations and amounts of uncurrent gold and silver coins transferred to the mint at Philadelphia are shown in the following table:

Denominations.	Pieces.	Value.
GOLD.		
Double eagles	12,748	$254,960.00
Eagles	19,548	195,480.00
Half eagles	73,152	365,760.00
Three-dollar pieces	4	12.00
Quarter eagles	3,744	9,360.00
Dollars	11	11.00
Total gold	109,207	825,583.00
SILVER.		
Dollars	1,100	1,100.00
Half dollars	1,221,024	610,512.00
Quarter dollars	4,723,730	1,180,932.50
Twenty-cent pieces	1,552	310.40
Dimes	6,029,542	602,954.20
Half dimes	74,081	3,704.05
Three-cent pieces	16,149	484.46
Total silver	12,067,178	2,399,997.61

In addition to the amount of uncurrent silver coin transferred for recoinage, there were transferred from the assistant treasurer of the United States at New York $4,500,000 in worn subsidiary silver coin and from the assistant treasurer at Chicago 1,000,000 silver dollars for storage.

During the year minor coins of the nominal value of $353,606.80 were transferred for cleaning and reissue and $268,234.20 for recoinage. The total number of pieces embraced in this coinage was 19,553,090.

The value of all kinds of coin received from the Treasury for recoinage was as follows:

Character.	Value.
Gold (face value)	$825,583.00
Silver	2,399,997.61
Minor coins	268,234.20
Total	3,493,814 81

The quantity and cost of minor coin blanks purchased were:

Character.	Pounds.	Price per pound.	Cost.
Bronze 1-cent pieces	309,000	$0.1994	$61,614.60
Nickel 5-cent pieces	30,500	.3194	9,741.70
Total	339,500		71,356.30

The total amount of gold and silver bullion received, including the surplus bullion, was:

Metal.	Standard ounces.	Value.
Gold	1,652,958.270	$30,752,711.99
Silver	2,102,062.66	2,373,583.06
Total value		33,126,295.05

The quantity of gold and silver operated upon by the melter and refiner was as follows:

Metal.	Standard ounces.
Gold	3,922,717.486
Silver	12,000,701.74

The number of melts made and the number condemned during the year was as follows:

Metal.	For bars made.	For ingots.	
		Made.	Condemned.
Gold	134	614	1
Silver	332	3,876	7
Total	466	4,490	8

The value of gold and silver bars prepared for use in the industrial arts during the year is shown in the following table:

Metal.	Standard ounces.	Value.
Gold	42,301.378	$787,002.36
Silver	52,388.17	60,960.78
Total value		847,963.14

The operations of the refinery in the mint during the year were as follows:

REFINERY OPERATIONS, FISCAL YEAR 1896.

Bullion.	Gold.	Silver.
	Standard oz.	*Standard oz.*
Gross weight, 1,507,369.590 ounces.		
Refined standard ounces by assay	496,314.342	1,117,567.34
Returned from refinery	496,342.116	1,117,595.08

The number of assays made by the assay department and the number of ounces of proof gold and silver made during the year ended June 30, 1896, were as follows:

Assays and ounces of proof metal.	Number.
Gold assays	32,140
Silver assays	8,770
Sweep assays	700
Special bullion assays	240
Bronze and nickel assays	150
Ounces proof gold	60
Ounces proof silver	100

The number of dies prepared in the engraver's department for the mints is shown in the following statement:

Dies prepared.	Number.
Philadelphia mint:	
Gold	87
Silver	165
Minor coins	389
Medals	34
San Francisco mint:	
Gold	24
Silver	104
New Orleans mint:	
Silver	80

COINER'S DEPARTMENT.

During the fiscal year 1896 the coiner operated upon 3,894,715.250 ounces of standard gold and upon 12,062,913.60 ounces of standard silver, resulting in the manufacture of coins as shown by the following statement:

Denomination.	Pieces.	Value.
Double eagles	1,512,548	$30,250,960.00
Eagles	364,749	3,647,490.00
Half eagles	393,928	1,994,640.00
Quarter eagles	11,960	29,900.00
Total gold	2,288,185	35,922,990.00
Dollars	4,500,822	4,500,822.00
Half dollars	1,893,160	946,580.00
Quarter dollars	5,582,822	1,395,705.50
Dimes	900,822	90,082.20
Total silver	12,877,626	6,933,189.70
Five cents	8,153,062	407,653.10
Cents	46,168,422	461,684.22
Total base	54,321,484	869,337.32

The gold wastage during the year was 28.975 ounces of standard gold, or 1.487 per cent of the legal allowance, and the percentage of finished coin produced from amount operated upon was 49.5.

The silver wastage during the same period was 2,124.64 ounces of standard silver, or 17.61 per cent of the legal allowance, and the percentage of finished coin produced from the amount operated upon was 48.9.

MEDALS MANUFACTURED DURING FISCAL YEAR ENDED JUNE 30, 1896.

Description.	Number.
Gold	58
Silver	413
Bronze	495
Total	966

GENERAL DEPARTMENT.

SALE OF PROOF COINS AND MEDALS.

The number of proof coins and medals manufactured, the nominal value and amount received for the same, and the profit are shown in the following table:

Items.	Number of pieces.	Nominal value.	Amount received.	Profit on sale.
Gold medals	59	$2,927.75	$3,214.11	$286.36
Silver medals	339	394.90	507.95	113.03
Bronze medals	428	27.97	201.35	173.38
Gold proof coins	323	2,422.50	2,502.00	79.50
Silver and minor coins	3,676	1,596.76	2,090.00	493.24
Minor proof coins	1,717	63.84	85.12	21.28
Total	6,542	7,433.72	8,600.51	1,166.79

The shipments of domestic gold and silver and minor coins from the mint at Philadelphia during the fiscal year 1896 were as follows:

Items.	Value.
Gold	$33,257,500
Silver dollars	14,999
Subsidiary silver coins	1,503,983
Minor coins	1,042,800
Total value	35,819,282

Among the improvements which have added to the efficiency of the establishment and comfort of the large number of employees a few may be worthy of mention.

The vertical ore crusher recently purchased at a cost of $400 has been shown to be an improvement on the former and somewhat primitive process of placing the ore under the rolls in the hopper of the sweep-grinding mill, as it reduces and separates with greater speed and efficiency such ores as the mint may receive.

Improvements have been made on the steam boilers by placing on them three water columns with modern gauge appliances, which indicate the condition of the water in the boilers, resulting in economy of fuel, a regular firing of the furnace, and insuring greater safety to the employees.

An improved water heater placed in the engine room has been of material advantage, as the old heater never fully performed the services required. New exhaust pipes have been supplied to the engines, the old ones having rusted to an extent that became dangerous. Large steam-coil radiators have been set in the front corridor and retiring room. The steam radiators throughout the building have been supplied with drip and vent cocks, which improve the circulation and regulation of heat, so that an even distribution of it can be maintained. The improvements to the steam appliances as enumerated were made under the direction and authority of the supervising architect of the department.

After an accumulation of eight years, the wells of the melter and refiner's department have been cleaned by an excavating company employed to empty them. (These wells receive the water in which ingots are cooled and also the washings from the hands of the men employed in the melting room.) The contents were put in barrels and the residue dried, ground, and reduced to sweeps, yielding 35 barrels. The product from this operation was:

Metals.	Weight.	Value.
	Ounces.	
Standard gold	149.348	$2,778.57
Standard silver	176.57	105.97
Total value		2,884.54

Sum paid for cleaning the wells, $120.

On recounting the silver dollars stored in the large vault, the bags are found to be mildewed and many broken, the result being that the coins in many instances are loose, scattered throughout the piles, and cast on the floor. At a moderate estimate, at least 4,000,000 of them will be found to be corroded so much as to make them totally unfit for circulation, making their recoinage necessary.

As each bag is counted it is weighed, and the value, weight, date, designation of vault, and the name of the counter written upon a linen tag attached thereto. It is then placed in a wooden box, the box being numbered to correspond with the number on the tag, each box thus holding $1,000. The box is then nailed and sealed, and the contents registered in a book. This course will not only preserve the bags and simplify a future count, but enable inaccuracy of count, if there should be any, to be traced to its source.

TRANSFER AND RECOINAGE OF UNCURRENT MINOR COINS.

The amount of uncurrent copper, nickel, and bronze coins on hand July 1, 1893, and the amount of such coins transferred from the Treasury to the mint at Philadelphia during the fiscal year 1896 for conversion into current minor coins, their cost and seigniorage, also the quantity recoined, the loss in recoinage, and the balance on hand June 30, 1896, is shown in the following table:

MINOR COINS FOR RECOINAGE, FISCAL YEARS 1894, 1895, AND 1896, MINT OF THE UNITED STATES AT PHILADELPHIA.

Balance on hand July 1, 1893		$720.03
Uncurrent coin transferred from United States Treasury, viz:		
Old copper cents	$1,852.39	
Nickel 1-cent coin	19,564.30	
Bronze 1-cent coin	31,401.21	
Bronze 2-cent coin	14,134.76	
Nickel 3-cent coin	31,753.38	
Nickel 5-cent coin	442,323.00	
		541,029.04
Cost of pure nickel added to nickel 1-cent metal to convert it into nickel 5-cent alloy for recoinage into nickel 5-cent coin		774.67
Cost of tin and zinc added to old copper-cent metal to convert it into bronze 1-cent alloy for recoinage into bronze 1-cent coin		50.57
Cost of metal of same alloy added to nickel 3-cent metal for recoinage into nickel 5-cent coin		547.45
Seigniorage (gain by recoinage)		87,853.39
		630,475.15
Coinage executed, nominal value, viz:		
Bronze 1-cent coin	$49,662.46	
Nickel 5-cent coin	420,596.55	
		470,259.01
Wastage (loss on recoinage)		26,727.74
Balance on hand June 30, 1896		133,488.40
		630,475.15

There are at present seven types of minor coins outstanding, viz, the copper half cent, copper cent, copper-nickel cent, bronze 1 and 2 cent pieces, and nickel 3 and 5 cent pieces, all but two of which, viz, the 1-cent bronze and 5-cent nickel pieces are classed as uncurrent, for the reason that the others are no longer coined, but are redeemed at

the Treasury in lawful money and transferred from time to time to the mint at Philadelphia for recoinage.

There were transferred from the Treasury to the mint at Philadelphia for recoinage from July 1, 1895, to June 30, 1896, worn and uncurrent minor coins of the various types, the aggregate face value of which was $268,234.20.

The Treasurer of the United States is reimbursed by the mint at the full face value for all minor coins transferred for recoinage.

By utilizing the old copper cents in the manufacture of bronze 1-cent pieces and the nickel 1 and 3 cent pieces in the coinage of 5-cent pieces no loss occurs, but, on the contrary, a gain accrues. A loss, however, occurs on the recoinage of worn and uncurrent bronze 1 and 2 cent pieces, as well as on the recoinage of the nickel 5-cent piece, but it is not nearly as great as the gain on the recoinage of old copper-nickel and nickel 3-cent pieces.

The net profit on the recoinage of uncurrent minor coins for the fiscal year 1895 was $57,083.22, and for the fiscal year 1896, $3,542.43.

The amount of uncurrent copper and bronze and nickel coins on hand at the mint on July 1, 1895, and the amount of such coins transferred from the Treasury to the mint at Philadelphia during the fiscal year 1896, for conversion into minor coin, their face value, and the seigniorage on the quantity coined as well as the loss in recoinage and the balance on hand June 30, 1896, is shown in the following table:

Balance on hand July 1, 1895		$40,805.45
Uncurrent coin transferred from United States Treasury:		
Old copper cents	$239.30	
Nickel 1-cent coin	3,730.79	
Bronze 1-cent coin	13,837.11	
Bronze 2-cent coin	2,745.00	
Nickel 3-cent coin	7,734.00	
Nickel 5-cent coin	239,948.00	
		268,234.20
Cost of pure nickel added to nickel 1-cent metal to convert it into nickel 5-cent alloy for recoinage into nickel 5-cent coin		132.60
Cost of tin and zinc added to old copper cent metal to convert it into bronze 1-cent alloy for recoinage into bronze 1-cent coin		5.81
Cost of metal of same alloy added to nickel 3-cent metal for recoinage into nickel 5-cent coin		120.08
Seigniorage (gain by recoinage)		16,297.39
Total		325,595.53
Coinage executed (nominal value):		
Bronze 1-cent coin	$16,646.72	
Nickel 5-cent coin	162,705.45	
		179,352.17
Wastage (loss by recoinage)		12,754.96
Balance on hand June 30, 1896		133,488.40
Total		325,595.53

The following table exhibits the several types and denominations of minor coins issued by the mint at Philadelphia since its establishment, the amount remelted, and the amount outstanding June 30, 1896:

TYPES OF MINOR COINS ISSUED.

Denominations.	Coined.	Remelted.	Outstanding June 30, 1896.
Copper cents	$1,562,887.44	$378,152.83	$1,184,734.61
Copper half cents	39,926.11		39,926.11
Copper-nickel cents	2,007,720.00	783,347.08	1,224,372.92
Bronze cents	8,073,560.34	71,492.94	8,002,067.40
Bronze 2-cent pieces	912,020.00	333,061.58	578,958.42
Nickel 3-cent pieces	905,768.52	262,438.12	643,330.40
Nickel 5-cent pieces	14,316,225.30	553,968.60	13,762,256.70
Total	27,818,107.71	2,382,461.15	25,435,646.56

MINOR COIN DISTRIBUTED FROM MINT OF THE UNITED STATES AT PHILADELPHIA DURING THE FISCAL YEAR 1896.

State or Territory.	5-cent nickel.	1-cent bronze.	State or Territory.	5-cent nickel.	1-cent bronze.
Alabama	$4,110.00	$1,190.00	Montana	$5,980.00	$2,160.00
Arizona		350.00	Nebraska	2,105.00	970.00
Arkansas	2,820.00	830.00	New Hampshire	2,630.00	2,180.00
California	5,830.00	2,655.00	New Jersey	37,225.00	38,405.00
Colorado	6,000.00	1,850.00	New Mexico	1,180.00	40.00
Connecticut	12,480.00	11,980.00	New York	84,695.00	87,050.00
Delaware	2,460.00	13,495.00	North Carolina	8,770.00	2,500.00
District of Columbia	1,890.00	1,300.00	North Dakota	1,160.00	1,320.00
Florida	2,305.00	470.00	Ohio	27,710.00	21,215.00
Georgia	7,550.00	3,090.00	Oklahoma	175.00	140.00
Idaho	225.00		Oregon	2,140.00	1,000.00
Illinois	42,845.00	29,500.00	Pennsylvania	188,627.10	110,502.02
Indian Territory	880.00	70.00	Rhode Island	9,190.00	10,000.00
Indiana	19,535.00	12,870.00	South Carolina	3,275.00	2,440.00
Iowa	14,250.00	10,060.00	South Dakota	2,170.00	725.00
Kansas	10,120.00	4,635.00	Tennessee	20,200.00	2,730.00
Kentucky	28,820.00	3,765.00	Texas	13,990.00	2,870.00
Louisiana	7,470.00	2,240.00	Utah	1,800.00	1,310.00
Maine	1,800.00	3,390.00	Vermont	3,480.00	1,060.00
Maryland	5,825.00	4,070.00	Virginia	12,090.00	3,555.00
Massachusetts	17,800.00	29,120.00	Washington	1,925.00	940.00
Michigan	9,180.00	12,770.00	West Virginia	7,140.00	2,795.00
Minnesota	19,050.00	14,325.00	Wisconsin	10,395.00	11,180.00
Mississippi	4,280.00	2,920.00	Wyoming	600.00	100.00
Missouri	14,950.00	14,985.00	Total	691,127.10	489,117.02

UNCURRENT SILVER COINS ON STORAGE AT THE MINT AT PHILADELPHIA, PA.

There are now on storage at the mint at Philadelphia $4,500,000 in worn and uncurrent subsidiary silver coins that are unfit for circulation and should be recoined.

The transfer of this coin to the mint was due to the fact that it became necessary to relieve the vaults of the assistant treasurer of

the United States at New York, and the only available vault room was found to be in the mint at Philadelphia.

It is greatly to be desired that an appropriation should be made by Congress to cover the loss on the recoinage of this coin. The loss on its recoinage is estimated to be about 6½ per cent, or $300,000.

MINT OF THE UNITED STATES AT SAN FRANCISCO, CAL.

The value and weight of gold and silver bullion deposited at the mint at San Francisco during the fiscal year 1896 were as follows:

Metal.	Standard ounces.	Value.
Gold	1,182,660.569	$22,002,987.33
Silver	626,203.68	728,673.37
Total value		22,731,660.70

During the year there were deposited at this mint for recoinage 497.714 standard ounces of United States gold coin of the face value $9,947.50, coining value $9,259.79, and 144.70 standard ounces United States silver coin of the face value of $194.98, coining value $168.38 in standard dollars, or $180.03 in subsidiary coin.

Foreign gold coin containing 5,681.907 standard ounces of the coining value $105,709.90 was deposited during the year.

During the year there was transferred from the Treasury for recoinage worn and uncurrent domestic subsidiary silver coin of the nominal value of $727,243.85, containing 563,931.91 standard ounces of silver of the coining value in new subsidiary coin of $701,626.

The melter and refiner received and operated upon bullion during the fiscal year containing 2,163,270.890 standard ounces of gold and 2,132,944.07 standard ounces of silver, of which amount the operations of the refinery comprise 268,456.019 standard ounces of gold and 138,434.46 standard ounces of silver, the bullion melted for coinage during the same period being 2,159,838.330 standard ounces gold and 2,071,225.75 standard ounces of silver.

Upon the annual settlement the melter and refiner returned a surplus of 1,029.146 standard ounces of gold, valued at $19,146.90, and 4,061.06 standard ounces of silver, valued at $2,406.65.

He made 736 melts of gold ingots, of which 1 was condemned, and 1,256 melts of silver ingots, of which 17 were condemned.

OPERATIONS OF THE MECHANICAL DEPARTMENT.

The coiner received and operated upon 2,213,413.300 standard ounces of gold and 2,412,830.65 standard ounces of silver during the fiscal year.

During the fiscal year the coiner manufactured $22,955,500 in gold coin and $1,377,451.50 in silver coin, a total of 3,291,478 pieces.

The proportion of finished coin produced during the year from ingots operated was gold, 56.3 per cent; silver, 52.6 per cent. Upon the annual settlement of the coiner's accounts it was found that there had been a wastage during the fiscal year of 190.426 standard ounces of gold, valued at $3,542.81, and 531 standard ounces of silver, valued at $314.68, being, respectively, 17.39 and 23.16 per cent of the legal allowance.

COINAGE EXECUTED AT THE MINT AT SAN FRANCISCO DURING THE FISCAL YEAR 1896.

Denomination.	Pieces.	Value.
GOLD.		
Double eagles	1,081,175	$21,623,500.00
Eagles	51,000	510,000.00
Half eagles	164,400	822,000.00
Total	1,296,575	22,955,500.00
SILVER.		
Dollars	1,050,000	1,050,000.00
Half dollars	484,903	242,451.50
Quarter dollars	260,000	65,000.00
Dimes	200,000	20,000.00
Total silver	1,994,903	1,377,451.50
Total coinage	3,291,478	24,332,951.50

The assayer made during the year 38,000 gold, 3,500 silver, and 400 miscellaneous and sweep assays.

The following table exhibits the denominations of domestic gold and silver coins melted at the mint at San Francisco during the fiscal year ended June 30, 1896:

Denomination.	Pieces.	Value.
GOLD.		
Double eagles	335	$6,700.00
Eagles	111	1,110.00
Half eagles	399	1,995.00
Quarter eagles	41	102.50
Three-dollar pieces	4	12.00
Dollars	28	28.00
Total gold	918	9,947.50
SILVER.		
Half dollars	1,078,173	$539,086.50
Quarter dollars	616,207	154,051.75
Twenty-cent pieces	81	16.20
Dimes	340,516	34,051.60
Half dimes	4,655	232.75
Three-cent pieces	1	.03
Total silver	2,039,633	727,438.83
Total gold and silver	2,040,551	737,386.33

The following table exhibits the amount of foreign gold coin melted at the mint at San Francisco during the fiscal year 1896:

Country of coinage.	Value in United States money.	Country of coinage.	Value in United States money.	Country of coinage.	Value in United States money.
Argentina	$14.46	France	$155.92	New Grenada	$83.47
Bolivia	15.40	Germany	353.43	Peru	33.80
Chile	80.45	Guatemala	60.85	Russia	27.86
Colombia	38.80	Holland	40.00	Spain	1,720.05
Costa Rica	128.14	Japan	21.93	Total	105,626.18
England	9,764.02	Mexico	93,087.60		

The annual settlement at the close of the fiscal year was superintended by Messrs. Jacob B. Eckfeldt, assayer of the United States mint at Philadelphia, assisted by Warren C. Noteware, chief clerk of the United States mint at Carson, Nev., who weighed and counted the bullion and coin on hand and reported that the balances as shown by the books were correct.

MINT OF THE UNITED STATES AT NEW ORLEANS.

The weight and value of the gold and silver deposited at the mint of the United States at New Orleans during the fiscal year ended June 30, 1896, were as follows:

Metal.	Standard ounces.	Value.
Gold	11,349.246	$211,148.76
Silver	1,147,693.91	1,335,498.37
Total value		1,546,647.13

There were purchased over the counter during the year 795.125 standard ounces of uncurrent domestic gold coin of the face value of $14,942.50, producing in new coin $14,793.02.

There were also deposited 6,388.847 standard ounces of unrefined foreign gold bullion and 267.714 standard ounces of foreign gold coin, making the value of foreign gold deposits $123,843.

Gold bullion to the amount of 3,528.522 standard ounces and the value of $65,646.92 was obtained from deposits of old gold plate and jewelry.

During the fiscal year 1896 there were transferred and deposited by the Treasury of the United States for recoinage 1,142,747.20 standard ounces of worn and uncurrent domestic silver coin of the nominal value of $1,499,900, representing a value of $1,421,769.45 in new subsidiary silver coin. There were also purchased as bullion at the current market price for silver 785.50 standard ounces of silver contained in

mutilated and uncurrent domestic silver coins of the face value of $988.55, and of the value of $977.29 in new subsidiary silver coin.

There were deposited 1,054.63 standard ounces of foreign silver bullion and coin, while there were obtained from old plate, jewelry, etc., 2,993.27 standard ounces.

The domestic silver bullion deposited aggregated 113.31 standard ounces.

MELTER AND REFINER'S OPERATIONS.

The amount of gold and silver delivered by the superintendent during the fiscal year to the melter and refiner was as follows:

Metal.	Standard ounces.	Value.
Gold	15,459.544	$287,609.42
Silver	5,301,708.88	6,169,261.23
Total		6,456,870.65

On the settlement of his accounts at the close of the year, it appeared that in operating on 15,459.544 ounces of standard gold he returned an excess of 18.676 ounces of standard gold, of the value of $347.46. In operating on 5,301,708.88 ounces of standard silver bullion during the year the wastage was 1,617.95 standard ounces, equivalent to 20.3 per cent of the legal tolerance for wastage.

The number of gold and silver ingot melts made by the melter and refiner and the number condemned by the assayer are shown in the following table:

INGOT MELTS MADE AND CONDEMNED.

Metal.	Melts for ingots.	
	Made.	Condemned.
Gold	4	1
Silver	588	4
Total	592	5

REFINERY OPERATIONS.

The weight and value of gold and silver operated upon in the refinery were as follows:

Bullion.	Standard ounces.	Value.
Gold	10,375.090	$193,024.93
Silver	2,726.43	3,172.57
Total		196,197.50

COINER'S OPERATIONS.

There were operated upon by the coiner during the fiscal year 1896 4,971,818.50 ounces of standard silver, delivered to him in the form of ingots. The amount of coin manufactured therefrom is shown in the following table:

COINAGE EXECUTED, FISCAL YEAR 1896.

Denominations.	Pieces.	Value.
Dollars	1,950,000	$1,950,000
Half dollars	1,232,000	616,000
Quarter dollars	2,180,000	545,000
Dimes	190,000	19,000
Total	5,552,000	3,130,000

No gold coinage was made during the year.

On the annual settlement, June 30, 1896, of the accounts of the coiner it was found that in operating on 4,971,818.50 standard ounces of silver there was a wastage of 497.78 standard ounces, equivalent to 10 per cent of the legal allowance.

ASSAY DEPARTMENT

The number of assays made during the year was as follows:

Character.	Number.
Gold	497
Silver	673
Total	1,170

Messrs. George R. Coming, of the New York assay office, and F. W. Braddock, of the Bureau of the Mint, superintended the annual settlement, June 30, 1896, and reported that the accounts of the superintendent were correct.

UNITED STATES MINT AT CARSON, NEV.

The value of the bullion received at the mint at Carson, Nev., during the fiscal year ended June 30, 1896, amounted to $536,817.66, against $1,660,353.89 for the previous year, a decrease of $1,123,536.23.

The weights and values of the deposits were as follows:

Metal.	Weight.	Value.
	Standard ozs.	
Gold	25,765.424	$479,356.73
Silver	49,380.49	57,460.93
Total value		536,817.66

Owing to the investigation and trials of the persons charged with the embezzlement of gold bullion from the melter and refiner's department, the refinery has not been operated during the year, and the business of this mint was limited to the receipt of gold deposits only.

At the annual settlement and examination at the close of the fiscal year, made by Mr. J. B. Eckfeldt, assayer of the United States mint at Philadelphia, the superintendent returned a surplus of 3.769 ounces of standard gold, valued at $70.31, and 15.35 ounces of standard silver, valued at $8.46.

EMBEZZLEMENT OF GOLD BULLION FROM THE MELTER AND REFINER'S DEPARTMENT.

Since the report of this Bureau for the fiscal year 1895 was printed the parties charged with the embezzlement of gold bullion from the melter and refiner's department of the mint at Carson—namely, John T. Jones, assistant melter and refiner, and James Heany, silver dissolver—have been convicted and sentenced to a term of eight years' imprisonment and to pay a fine of $5,000. Mr. Andrew Mason, superintendent of the United States assay office at New York, who was charged with making the investigation, has submitted the following report on the manner in which the embezzlement was made, and the evidence upon which the guilty parties were convicted:

UNITED STATES ASSAY OFFICE, SUPERINTENDENT'S OFFICE,
New York, November 7, 1896.

SIR: Having been instructed by you to investigate the matter of a shortage in the bullion in the melter and refiner's department, which had been reported by the superintendent (J. W. Adams) of the United States mint at Carson, Nev., I found on my arrival, on March 15, 1895, that Mr. A. L. Gallagher, of the United States Secret Service, had been in Carson for a few days making inquiries and observations outside of the mint, having been assigned to service with me.

I learned in the mint that Mr. Hirsch Harris became melter and refiner on June 1, 1894 (Governor Adams became superintendent at the same time). The melts of gold and silver bullion remaining in the hands of his predecessor (E. B. Zabriskie) at that date had been transferred to him at the same weight and fineness at which they had been credited to Mr. Zabriskie in closing his account. The deposits received subsequently had been turned over to him by the superintendent, from month to month, at the weight and fineness with which the depositors had been credited in their payment. The parting and refining operations had been conducted in the same way that had been customary, Mr. John T. Jones, who had been assistant melter and refiner the previous four years, continuing in that position and actively looking after the operations of the department, as before. The fine gold and fine silver melts, the product of these operations, had been delivered to the superintendent as usual.

Until December 5, 1894, the sulphuric acid process had been used in parting the gold from silver. At that date and until January 3, 1895, a quantity of bullion containing a large proportion of base metal was operated upon by the nitric-sulphuric process. The gold obtained from it was kept by itself (not mixed with that from previous workings of bullion by the sulphuric acid process) and on being melted weighed 8,918.352 ounces standard instead of 10,432.629 ounces standard, which the bullion (57,132.40 ounces) ought to have yielded, according to calculations based on the recorded weight and fineness of its constituent melts. This shortage (1,514.277 ounces standard gold) alarmed the melter and refiner, who at once proceeded to have the "slum" (a leaden tank which received all solutions washed from fine gold

sponge, etc., and in which any gold which might pass over in the washings by decantation would settle at the bottom) cleaned out, and the amount of gold in it exactly determined. It was found to be about 700 ounces standard, so that if it had all been credited to that operation, there would still have been a shortage of about 800 ounces of standard gold. As, however, the washing of the gold in that process had been done with great care, it was obvious that only a very limited proportion of the "slum" gold came from that. The matter was reported to the superintendent by Mr. Harris, and the remaining unparted bullion melts (deposits, etc.) were reweighed, and the exact amount of gold in them determined. The contents of various residues and gatherings from a clean up of the department were also ascertained. When the gold in these was deducted from the balance of account due by the melter and refiner to the superintendent, there appeared to be a deficit of about 3,000 ounces standard gold. This revealed the further startling fact that the shortage in the gold received from the bullion worked by the sulphuric acid process had also been very large. It was then (February 13, 1895) that the melter and refiner made a formal official announcement of the shortage to the superintendent, who sent the same to yourself, with the request that some competent person be sent to Carson to investigate the matter.

Some silver bars that had been overlooked in the excitement incident to such a condition of affairs had been found which more than balanced the reported shortage in that metal, giving a large surplus instead.

Careful inquiries of the officers and employees failed to elicit the cause of the shortage of gold, and nothing appreciable was found, on a careful examination of the premises, including the chimneys and roofs of the building. The men employed in the department (especially those in the separating room) had been under surveillance, without result. Mr. Harris thought that the shortage must have been occasioned by theft of the gold from there, although the bullion received by him might not have contained all the gold charged in account. While the unparted bullion in his possession was being delivered to the superintendent, under my supervision, a number of melts having considerable gold in them were reassayed. Among them was a melt recorded as "silver purchase No. 164," received November 7, 1892, weighing 2,133.30 ounces, and containing 482½ thousandths gold and 500 thousandths silver. It was found, on a reassay, to have 19½ thousandths gold and 946 thousandths silver, showing a deficiency in gold of $20,417.93 (1,097.464 ounces standard).

On examining the record of the delivery of bullion by the melter and refiner to the superintendent in the settlement of June, 1893, it seemed clear from its relative position on the list of melts that it had been made toward the close of the delivery, indicating that a previously unknown deficiency had been made up or covered by that melt just in time to make the melter and refiner's settlement a satisfactory one. This could only have been done through the agency of the assistant melter and refiner (John T. Jones), whom I found to have been the active manager of the department (Mr. Zabriskie had long been more or less of an invalid, and was absent at that time). The present shortage of gold (thus increased to $75,549.75) suggested that Mr. Jones must have covered stealings on his own account by other spurious melts, and at the last moment, to prevent an investigation, been obliged to cover the stealings of another thief previously unknown or whose capacity he had underrated.

Strangely enough, on the next day the superintendent received information from Reno that James H. Heney (who had been employed for several years in the separating room previous to June 30, 1893) had brought fine gold worth over $20,000 to the Reno (Nevada) Reduction Works (where he was unknown) for melting and assay in August, 1893. Both cases were promptly brought to the attention of the United States district attorney. They were arrested (Mr. Heney after a prolonged flight and close pursuit by members of the United States Secret Service) and after examination before the United States commissioner were held for the action of the grand jury on August 19, 1895. True bills were found against both, and their trial fixed for November 11, 1895. At that time Mr. Heney's case was taken up.

The theory of the defense was that the spurious melt had been made in February or March, 1895, by Mr. Harris, the present melter and refiner; that the original genuine silver purchase melt, No. 164, had not only been delivered in the settlement of June, 1893, to the superintendent, but also in the transfer from the old to the new officials in June, 1894, and receipted for as such; and that as there had been no shortage in the accounts, there could have been no gold stolen from the mint by anyone previous to June, 1894. Therefore, any gold that Mr. Heney might have disposed of at the Reno Reduction Works came from other and legitimate sources. The actual shortage existing in February, 1895, it was alleged, arose from losses in the separating room, incident to lack of experience by new employees; and an expert witness from San Francisco testified that the missing gold might have been dissolved, owing to the use of impure acids; a large quantity from that treated by the sulphuric acid process having been delivered in the sulphate of copper solution to the purchaser of that liquid; and another large quantity from that treated by the nitric-sulphuric process having been run into the sewer. It was testified that samples from various parts of the sewer had been sent to the same expert for assay, and reported to be rich in gold.

The manager of the works to which the sulphate of copper was delivered testified that the gold in it caused a large increase in the yield of gold from ores on which it was used, nearly double the amount per ton being obtained from said ores.

On the part of the Government it was shown that the consolidation record kept in the melter and refiner's department had a number of leaves carefully removed, presumably with the intention of removing evidence of the use of the original melt "silver purchase No. 164" in the separating room, and probably of other like melts which had also been treated there and yet turned over (spurious ones) in the settlement. Also that quite a number of the melts contained in the bullion treated by the nitric-sulphuric process already referred to were deposits of the previous year that had been transferred to the present melter and refiner in June, 1894, and presumably some of them were spurious. It was found and testified that the record of bullion sent to the separating room in July, 1894, showed that it was composed entirely of melts received in the transfer of June, 1894, and that there was a large deficit (about 1,300 ounces standard) in the gold from the workings of that month, while subsequently, when the bullion received on deposit during the term of the present melter and refiner was treated by the sulphuric-acid process, the return of gold was satisfactory. It was also shown by the record of bullion sent to and the fine gold returned from the separating room during the year ending June, 1893, that there was a deficit of from 2,200 to 2,900 ounces standard gold, according as certain melts in the June delivery might be classified as made from residues from bullion operated upon, or from deposit bullion that had not been treated. The account was not balanced as it had been in previous years.

The jury failed to agree, and a new trial was ordered for December 2, 1895. Meantime, another lot of bullion was separated, using the same acids (nitric and sulphuric) in precisely the same way by the same men, and the calculated amount of gold in the bullion was obtained. Not a trace of gold was found in any of the solutions when carefully tested. This was presented with the evidence from the books in connection with the spurious melt No. 164 and the disposal of the stolen gold by Mr. Heney at the Reno Reduction Works. Moreover (on the new trial), a witness testified that he had been paid $400 to send his son to Canada and $400 more to secrete himself to avoid the service of a subpœna on the previous trial. Mr. Heney had hired a vehicle from him in August, 1893, and was driven at night from Carson to Reno by his son, stopping on the outskirts of Carson to take two bags of shot (fine gold) from their place of concealment. On this, as on the previous trial, the mass of gold melted and assayed in the reduction works was clearly identified by the parties who handled it there as being powdered or sponge fine gold, the same as that shown them

in the mint. They had had no knowledge by inspection of mint fine gold in the form of sponge or powder in August, 1893.

The jury brought in a verdict of guilty on December 21, and on December 24 Mr. Heney was sentenced to imprisonment for eight years and a fine of $5,000.

The trial of Mr. Jones was postponed to March 2, 1896. At that time, in addition to the evidence heretofore described, it was shown by a careful comparison of the bullion melts delivered by the superintendent to the melter and refiner (during the year ending June, 1893) with the melter and refiner's record of the disposition of those melts that the sum of the melts sent to the separating room and those delivered back to the superintendent in the settlement gave an excess of over 2,200 ounces standard gold in the latter over that in the former. An identification of the other spurious melts that had been used, in addition to "silver purchase No. 164" that had providentially been carried over to 1895, was impossible, owing to the abstraction of many pages of the consolidation book, but the gross amounts of the consolidated melts that had been placed in the general record of bullion sent to the separating room proved beyond doubt that there had been other spurious melts used in the settlement in place of genuine ones, whose gold had been taken out in the separating room and stolen or used to replace other gold that had been embezzled by Mr. Jones, who had full and constant control of the bullion while in the vault attached to the office of the melter and refiner.

Nevertheless, the jury failed to agree, and on March 19 was discharged. Mr. Jones's second trial was fixed for April 20, 1896. During the interval, while making a careful comparison of the bullion accounts for the year ending June, 1891 (in which year Mr. Jones became assistant melter and refiner), tracing the individual history of every bullion melt, it was found that two melts that had been received as deposits on April 20, that is—

	Weight.	Gold fineness.	Silver fineness.	Standard gold.	Standard silver.
	Ounces.			*Ounces.*	*Ounces.*
Silver purchase No. 523	3,811.40	0.054	0.937	228.684	3,968.09
Silver purchase No. 524	3,856.10	.055	.937	235.650	4,014.62

and had been sent to the separating room on April 27 and 28, respectively, and treated, were nevertheless among the melts returned in the settlement of June, 1891. After having been redelivered to the melter and refiner at the close of the settlement, they were recorded as having been separated again in July, 1891. In the year ending June, 1892, the following melts were received as deposits in April:

	Weight.	Gold fineness.	Silver fineness.	Standard gold.	Standard silver.
	Ounces.			*Ounces.*	*Ounces.*
Silver purchase No. 437	5,726.80	0.108	0.884	687.216	5,624.99
Silver purchase No. 462	5,669.30	.093½	.899	588.977	5,663

These were sent to the separating room in May, and appear among the melts delivered to the superintendent in the June settlement.

In the consolidation record the numbers originally entered (437 and 462) had been roughly erased and the numbers "Ex. 37" and "Ex. 67" written over them, respectively—obviously for concealment, as no such numbers appeared on the assayer's records.

These two melts, like the ones of 1891, were, after being redelivered to the melter and refiner, at the close of the settlement, sent to the separating room, in July, 1892.

Although the eleven months ending May, 1894, had previously been examined by a similar method, the records of that were treated the same way. Again two melts were found that had undergone the same strange experience, viz:

	Weight.	Gold fineness.	Silver fineness.	Standard gold.	Standard silver.
	Ounces.			*Ounces.*	*Ounces.*
Fine bar deposit No. 47.....	1,266.80	0.475½	0.501	669.292	705.18
Fine bar deposit No. 76.....	1,380.60	.245½	.705	376.597	1,081.47

They had been received as deposits on January 5 and February 5, and sent to the separating room on February 3 and March 13, respectively, while they were subsequently delivered to the superintendent in the settlement of May, 1894. The numbers "Fine bar deposits 47 and 76" in the consolidation record had been erased (imperfectly) and "Ex. 04" and "Ex. 07" written over them, respectively; evidently, as in the year 1892, for concealment.

These two melts were used in making up the bullion mixture treated by the nitric-sulphuric process in December, 1894, and January, 1895. Their spurious character, now proved, accounted for over 1,000 ounces standard gold of the large shortage in that operation more clearly than by its exit through one pipe into the sewer and by another in the sulphate of copper to an ore-working establishment. All the original entries of these melts were in the handwriting of Mr. Jones, and the new numbers over the imperfectly erased ones were likewise written by him. These additional revelations from the records showed conclusively that the melter and refiner's department had been turned into a regular manufactory of spurious melts from the time of Mr. Jones's appointment, in 1891, until June, 1894, when Mr. Harris became melter and refiner.

The last two discovered (in 1894), with "Silver purchase 164" of 1893, covered the abstraction of 2,100 ounces of standard gold—more than one-half of the shortage of 4,060.799 ounces standard ($75,549.75).

The composition of spurious "Silver purchase 164" (0.019½ gold and .946 silver) was suggestive of that of the others, and therefore a wastage of 3,458.26 ounces standard silver in 1891, when the manufacture of spurious melts began, was properly supplemented by a surplus of 3,019.48 ounces standard silver in 1895, when the gold into which the silver had been transmutted was reconverted into the original silver. As there should have been a surplus of gold resulting from fractional gains in fineness during the five years of about $25,000, the total amount stolen was probably $100,000.

Mr. Jones's accounts with bankers and brokers showed a loss instead of a large gain that he had claimed as explaining sudden financial ease and plenty in 1891 and afterwards.

With the new evidence added to that presented on the first trial, the second jury brought in a verdict of "guilty" on May 2, after having been out but a few minutes.

On May 4, 1896, Mr. Jones was sentenced to eight years' imprisonment and $5,000 fine.

The real cause of the shortage of gold in the Carson Mint had been made evident.

These men (Jones and Heney) had not only stolen from the Government the gold intrusted to their care, but had endeavored to fix the guilt on others.

The present officers and employees of the mint have been completely relieved of the imputation cast on them.

Very respectfully,

ANDREW MASON,
Superintendent U. S. Assay Office, New York.

The DIRECTOR OF THE MINT,
Washington, D. C.

UNITED STATES ASSAY OFFICE AT NEW YORK.

The value of the gold and silver received during the year aggregated $49,091,947.76, against $43,232,906.34 for the previous fiscal year, or an increase of $5,859,041.42. The weight and value were as follows:

Metal.	Standard ounces.	Value.
Gold	2,248,785.998	$41,837,879.02
Silver	6,233,965.28	7,254,068.69
Total		49,091,947.71

Uncurrent and mutilated domestic gold coins of the nominal value of $530,575 were melted and found to contain 28,260.596 ounces of standard gold, of the value of $525,778.53.

Uncurrent and mutilated domestic silver coin of the face value of $3,245.50 was melted, producing 2,330.23 ounces of standard silver, of the coining value in subsidiary coin of $2,899.20.

Foreign gold coins of the value of $3,115,158.50 in United States money were melted, and foreign silver coins containing 167,709.65 ounces of standard silver.

The value of gold bars exchanged for gold coin was $36,218,270.91, of which $29,897,201.82 was for export and $6,321,069.09 for domestic use.

The quantity of gold and silver operated upon by the melter and refiner's department during the year was:

Metal operated on.	Standard ounces.
Gold	2,286,907.148
Silver	6,208,465.35

The operations of the refinery were as follows:

Bullion.	Weight.
Gross weight, 3,715,549.44 ounces.	*Standard ounces.*
Gold	558,999.55
Silver	3,274,785.29

During the year the number of fine, mint, and standard bars made and delivered to the superintendent was 54,389, containing 2,275,002.086 ounces of standard gold and 6,117,282.98 ounces of standard silver.

The number of gold deposits melted was 8,361; silver deposits, 3,231; total, 11,592.

The quantity of sulphuric acid used in the parting operations was 1,365,650 pounds. The products of the sale of spent acid and blue vitriol amounted to $9,337.99 and for old material $348.58, a total of $9,686.57.

On the annual settlement, June 30, 1896, of the melter and refiner's accounts, it was found that in operating upon 2,286,907.148 ounces of standard gold he returned an excess of 828.724 ounces standard, of the value of $15,418.12, and in his operations on 6,208,465.35 ounces standard of silver he returned an excess of 7.10 ounces standard.

It is worthy of note that of the earnings ($109,399.21) $22,516.51 was from the charges for exchange of gold bars for gold coin ($29,897,201.82) for export, while at the same time the expenses incident to transportation and coinage of $29,897,201.82 were saved.

Messrs. F. P. Gross and W. F. Bowen, of the Bureau of the Mint, superintended the annual settlement, June 30, 1896, and reported that they found on hand all the coin and bullion with which the superintendent was charged.

The deposit melts assayed and computed during the fiscal year ending June 30, 1896, numbered 11,592. There were also assayed and stamped 14,000 melts of fine metal, containing over 54,000 bars.

Eight hundred special assays were made, many of them being articles of manufactured silverware marked "sterling," the same having been brought to the assay office in order that the fineness of the same might be accurately determined for use in the settlement of the suits brought against parties for offering silverware as of sterling or standard fineness which was found upon assay to be less than either sterling or standard.

Over 1,000 mixed melts of bullion and 600 barrels of sweeps were assayed for the melter and refiner. The large increase in the number of deposits made increased the work correspondingly over the previous year, requiring the making and use of some 70,000 cupels.

During the year a power press was purchased for use in making cupels, in place of the hand press formerly used. A hydraulic press was also substituted for the trip hammer used in preparing samples for the rolls, doing away with the noise and jar occasioned by the use of the trip hammer.

MINT OF THE UNITED STATES AT DENVER, COLO.

During the fiscal year 1896 the value of the bullion deposited at this institution amounted in the aggregate to $4,225,983.41, as against $5,637,459.51 for the previous fiscal year, showing a decrease of $1,411,476.10.

Mutilated domestic gold coins of the nominal value of $254, containing 13.177 standard ounces, of the coining value of $245.15, were received and melted during the year.

The following statement exhibits the value of the deposits, earnings, and expenditures; also the percentage of net expenses to deposits for the fiscal year 1896:

Items.		Amount.
Deposits:		
Gold	$4,168,255.39	
Silver	57,728.02	
		$4,225,983.41
Earnings		8,638.78
Expenditures		36,807.06
Percentage of net expenses to deposits, $0.66896.		

ASSAY OFFICE OF THE UNITED STATES AT BOISE, IDAHO.

The deposits of bullion, principally from the mines of Idaho and Oregon, at the assay office at Boise during the fiscal year 1896 amounted to $1,166,251.68, against $1,198,149.91, the amount of deposits reported for the previous year.

The deposits, earnings, and expenditures for the fiscal year are as follows:

Items.		Amount.
Deposits:		
Gold	$1,144,346.15	
Silver	21,905.53	
		$1,166,251.68
Earnings		4,433.97
Expenses		12,200.00
Percentage of net expenses to deposits, 0.66589.		

ASSAY OFFICE OF THE UNITED STATES AT HELENA, MONT.

The value of the gold and silver bullion deposited at the United States assay office at Helena during the fiscal year 1896 aggregated $2,387,737.55, against $2,233,884.40 for 1895, an increase of $153,853.15; an increase of $367,004.50 over the year 1894; an increase of $854,936.08 over the year 1893, and an increase of $1,023,049.46 over the year 1892, showing a very material increase each year for the past four years. The principal deposits of domestic bullion were received from the mines of Montana and Idaho. There were no deposits of mutilated or uncurrent coins of the United States.

The melting department made over 3,500 melts of bullion during the year. The addition of electricity as power facilitates the work of the office to a considerable extent.

The following table exhibits the amount of deposits, earnings, and

expenditures, with the percentage of net expenses to deposits, for the fiscal year:

Items.		Amount.
Deposits:		
Gold	$2,336,517.64	
Silver	51,219.91	
		$2,387,737.55
Earnings		6,056.65
Expenditures		25,446.45
Percentage of net expenses to deposits, 0.81205.		

UNITED STATES ASSAY OFFICE AT CHARLOTTE, N. C.

The deposits of all bullion from the mines of the South Appalachian range at the assay office at Charlotte during the fiscal year ended June 30, 1896, amounted to $274,569.48, as against $236,041 for the fiscal year 1895.

No deposits of mutilated or uncurrent domestic coins were made at this institution during the year.

The deposits, earnings, and expenditures for the fiscal year were as follows:

Items.		Amount.
Deposits:		
Gold	$273,225.88	
Silver	1,343.60	
		$274,569.48
Earnings		1,206.42
Expenditures		4,749.72
Percentage of net expenses to deposits, 1.29049.		

ASSAY OFFICE OF THE UNITED STATES AT ST. LOUIS, MO.

The value of deposits of bullion during the fiscal year 1896 at the assay office at St. Louis aggregated $106,204.58, against $160,161.12 for the previous fiscal year, a decrease of $53,956.54.

The deposits included uncurrent domestic gold coin of the nominal value of $8,446.50, the value of the same in new coin being $8,362.25.

The following table exhibits the amount of deposits, earnings, and expenditures; also percentage of net expenses to deposits during the fiscal year 1896:

Items.		Amount.
Deposits:		
Gold	$104,851.83	
Silver	1,352.75	
		$106,204.58
Earnings		682.89
Expenditures		4,385.87
Percentage of net expenses to deposits, 3.48664.		

RECOINAGE OF STANDARD SILVER DOLLARS.

During the fiscal year 1896 there were transferred from the Treasury to the mints 1,100 mutilated and uncurrent silver dollars, and there were purchased at the mints and at the assay office at New York 934 silver dollars, making the number of uncurrent silver dollars received for recoinage during the year 2,034, which were used in the manufacture of subsidiary silver coins.

The total number of mutilated and uncurrent silver dollars received and melted at the mints and at the assay office at New York from 1883 to the close of the fiscal year 1896 is shown in the following statement:

Fiscal year.	Amount.	Fiscal year.	Amount.
1883	$621	1891	$10,800
1884	.....	1892	42,881
1885	1,850	1893	10,500
1886	.....	1894	15,055
1887	8,292	1895	18,580
1888	14,055	1896	2,034
1889	31,042	Total	167,687
1890	11,977		

BULLION OPERATIONS, LEGAL ALLOWANCE, AND WASTAGE, 1896.

The following table shows the amount of gold and silver operated upon, legal allowance, wastage, and per cent of loss of the legal allowance at the mints of the United States and the assay office at New York during the fiscal year 1896:

GOLD AND SILVER OPERATED UPON, LEGAL ALLOWANCE, WASTAGE, AND THE PER CENT OF THE LOSS OF THE LEGAL ALLOWANCE DURING THE FISCAL YEAR ENDED JUNE 30, 1896.

Institution and department.	Gold bullion.				
	Amount operated upon.	Surplus.	Legal allowance.	Actual wastage.	Loss of the legal allowance.
Philadelphia:	*Standard oz.*	*Stand. oz.*	*Standard oz.*	*Stand. oz.*	*Per cent.*
Melter and refiner's	3,922,717.486	.....	3,922.717	197.731	5.041
Coiner's	3,894,715.250	.....	1,947.357	28.975	1.487
San Francisco:					
Melter and refiner's	2,163,270.890	1,029.146	2,163.270	.....	.....
Coiner's	2,213,413.300	.....	1,106.635	190.426	17.207
New Orleans:					
Melter and refiner's	15,459.544	18.676	15.459	.....	.....
Coiner's	.....	.....	.....	.....	.....
Carson:					
Melter and refiner's	40,863.885	3.769	40.863	.....	.....
New York:					
Melter and refiner's	2,286,907.148	828.724	2,286.907	.....	.....

GOLD AND SILVER OPERATED UPON, LEGAL ALLOWANCE, WASTAGE, AND THE PER CENT OF THE LOSS OF THE LEGAL ALLOWANCE, ETC.—Continued.

Institution and department.	Silver bullion.				
	Amount operated upon.	Surplus.	Legal allowance.	Actual wastage.	Loss of the legal allowance.
Philadelphia:	*Standard oz.*	*Stand. oz.*	*Standard oz.*	*Stand. oz.*	*Per cent.*
Melter and refiner's	12,900,701.74	1,593.67	19,348.66	.....	.....
Coiner's	12,062,913.60	.....	12,062.91	2,124.64	17.613
San Francisco:					
Melter and refiner's	2,132,944.07	4,061.06	3,199.41	.....	.....
Coiner's	2,412,830.65	.....	2,412.83	531.00	22.007
New Orleans:					
Melter and refiner's	5,301,708.88	.....	7,952.55	1,617.95	20.345
Coiner's	4,971,818.50	.....	4,971.81	497.78	10.012
Carson:					
Melter and refiner's	698,952.19	15.35	1,049.42	.....	.....
New York:					
Melter and refiner's	6,208,465.35	7.10	9,312.70	.....	.....

QUANTITY OF METALS OPERATED UPON, WASTAGE, AND LOSS, FISCAL YEAR 1896.

In quantity the precious metals operated upon in the different departments of the mints and assay offices during the fiscal year ended June 30, 1896, exceeded 498 tons of gold and 1,600 tons of silver.

The value of the precious metals wasted in the metallurgical and mechanical departments was $10,622.57. A loss of $12,561.08 occurred from the difference between the assay value of bullion contained in sweeps and leady melts sold and the amount received for the same.

The wastages and losses aggregated $23,183.65. Against these losses there were gains arising from the operations on bullion as follows:

GAINS ARISING FROM BULLION OPERATIONS, 1895 AND 1896.

Character of gains.	Fiscal year—	
	1895.	1896.
Surplus bullion returned by the operative officers	$41,792.96	$38,364.01
Precious metals recovered in grains and sweeps	13,513.48	6,919.78
Gain on bullion shipped from the minor assay offices to the mint for coinage	6,203.15	7,004.38
Total gains	61,509.59	52,288.17

Deducting the value of the total operative, wastage, and loss on sale of sweeps from the incidental gains on bullion, there was a net gain in the operations of the mints during the fiscal year of $29,104.52.

COST OF COINAGE, 1895 AND 1896.

The following table exhibits the cost per piece of the coins executed at the mints of the United States during the fiscal years 1895 and 1896:

COST OF COINAGE EXECUTED AT THE COINAGE MINTS OF THE UNITED STATES DURING THE FISCAL YEARS 1895 AND 1896.

Coinage mint.	Pieces coined.		Pieces coined exclusive of minor coins.	
	Fiscal year—		Fiscal year—	
	1895.	1896.	1895.	1896.
Philadelphia	43,958,601	69,487,295	8,871,299	15,165,811
San Francisco	8,401,011	3,291,478	8,401,011	3,291,478
New Orleans	7,251,500	5,552,000	7,251,500	5,552,000
Total	59,611,112	78,330,773	24,523,810	24,009,289

Coinage mint.	Expenses for salaries, wages, and incidentals.		Cost per piece including minor coins.		Cost per piece excluding minor coins.	
	Fiscal year—		Fiscal year—		Fiscal year—	
	1895.	1896.	1895.	1896.	1895.	1896.
Philadelphia	$403,503.38	$410,416.71	$0.009179	$0.005906	$0.04548	$0.027062
San Francisco	256,747.59	280,507.68			0.03056	0.085222
New Orleans	136,410.03	114,427.44			0.01881	0.020610
Total	796,661.00	805,351.83				
Average			0.013364	0.010281	0.03248	0.033543

The following table exhibits the cost per dollar of the coins stamped at the mints of the United States during the fiscal years 1895 and 1896:

COST OF COINAGE PER DOLLAR AT THE COINING MINTS OF THE UNITED STATES DURING THE FISCAL YEARS 1895 AND 1896.

Coining mint.	Gold, silver, and minor coinage.		Gold and silver coinage.	
	Fiscal year.		Fiscal year.	
	1895.	1896.	1895.	1896.
Philadelphia	$24,039,439.37	$43,725,517.02	$23,326,845.35	$42,856,179.70
San Francisco	24,920,110.25	24,332,951.50	24,920,110.25	24,332,951.50
New Orleans	4,756,000.00	3,130,000.00	4,756,000.00	3,130,000.00
Total	53,715,549.62	71,188,468.52	53,002,955.60	70,319,131.20

Coining mint.	Expenses for salaries, wages, and incidentals.		Cost per dollar, including minor coins.		Cost per dollar, excluding minor coins.	
	Fiscal year.		Fiscal year.		Fiscal year.	
	1895.	1896.	1895.	1896.	1895.	1896.
Philadelphia	$403,503.38	$410,416.71	$0.016785	$0.009386	$0.01729	$0.009576
San Francisco	256,747.59	280,507.68			.01030	.011527
New Orleans	136,410.03	114,427.44			.02868	.036564
Total	796,661.00	805,351.83				
Average			.00148318	.0113129	.01503	.011452

SUMMARY OF THE WORK OF THE MINOR ASSAY OFFICES, 1896.

The following tables of deposits, earnings, and expenditures, with the percentage of net expenditures to deposits and the manufacture of unparted bars, summarizes the work of the minor assay offices, including the mint at Denver, during the fiscal year 1896:

DEPOSITS, EARNINGS, AND EXPENDITURES, WITH PERCENTAGE OF NET EXPENSES TO DEPOSITS.

Institution.	Deposits.	Earnings.	Expenses.	Percentage of net expenses to deposits.
Denver	$4,225,983.41	$8,636.78	$36,907.06	0.66896
Boise	1,166,251.68	4,433.97	12,200.60	.66589
Helena	2,387,737.55	6,056.65	25,446.45	.81205
Charlotte	274,569.48	1,206.42	4,749.72	1.29049
St. Louis	106,204.58	682.89	4,385.87	3.48664
Total	8,160,746.70	21,016.71	83,689.10	.....
Average	.....	.....	.....	.76797

UNPARTED BARS MANUFACTURED FROM DEPOSITS OF BULLION AND SHIPPED TO THE MINT AT PHILADELPHIA FOR COINAGE.

Institution.	Unparted bars.	
	Gold.	Silver.
Denver	$4,168,255.39	$57,728.02
Boise	1,144,346.15	21,905.53
Helena	2,336,517.64	51,219.91
Charlotte	273,225.88	1,343.60
St. Louis	104,851.83	1,352.75
Total	8,027,196.89	133,549.81

SUMMARY OF OPERATIONS OF MINTS AND ASSAY OFFICES.

The precious metals received at all the mints and assay offices during the fiscal year 1896 were valued at $115,159,820, against $103,196,455 the previous fiscal year.

METALLURGICAL OPERATIONS, 1895 AND 1896.

The operations of the melting and refining departments of the coinage mints and of the assay office at New York for 1895 and 1896, as far as the value of the metals treated is concerned, are exhibited in the following table:

BULLION OPERATIONS OF THE MELTING DEPARTMENTS, 1895 AND 1896.

Metal.	Fiscal year 1895.		Fiscal year 1896.	
	Standard ounces.	Coining value.	Standard ounces.	Coining value.
Gold	6,588,943	$122,584,988	8,437,739	$156,981,191
Silver	27,019,984	31,441,435	27,299,277	31,766,431
Total	.....	154,026,423	.....	188,747,622

MECHANICAL OPERATIONS, 1895 AND 1896.

The operations of the coining branches of the mints during the fiscal years 1895 and 1896 in the manufacture of finished coin from ingots prepared by the melting departments were, in value of the metals operated upon, as follows:

BULLION OPERATIONS OF THE COINING DEPARTMENTS, 1895 AND 1896.

Metal.	Fiscal year 1895.		Fiscal year 1896.	
	Standard ounces.	Coining value.	Standard ounces.	Coining value.
Gold	4,693,537	$87,321,619	6,108,128	$113,639,591
Silver	16,840,110	19,595,763	19,447,561	22,629,889
Total		106,917,382		136,269,480

WORK OF THE MINOR ASSAY OFFICES, 1895 AND 1896.

The work of the minor assay offices at Helena, Mont., Boise, Idaho, Charlotte, N. C., and St. Louis, Mo., and of the mint at Denver, Colo., which consists in the receipt and assaying of deposits and the manufacture of unparted bars of gold and silver, during the fiscal years 1895 and 1896, was as follows:

OPERATIONS OF MINOR ASSAY OFFICES, 1895 AND 1896.

Metals.	Fiscal year 1895.		Fiscal year 1896.	
	Standard ounces.	Coining value.	Standard ounces.	Coining value.
Gold	502,693	$9,352,431	431,462	$8,027,200
Silver	97,336	113,264	114,770	133,550
Total		9,465,695		8,160,750

OPERATIONS OF THE MINT SERVICE, 1895 AND 1896.

The following table is a summary of the three preceding tables, showing the value of the precious metals operated on at the mints and minor assay offices during the fiscal years 1895 and 1896:

BULLION OPERATED UPON IN THE MELTING AND COINING DEPARTMENTS OF ALL THE MINTS AND ASSAY OFFICES, 1895 AND 1896.

Metals.	Fiscal year 1895.		Fiscal year 1896.	
	Standard ounces.	Coining value.	Standard ounces.	Coining value.
Gold	11,785,173	$219,259,038	14,977,329	$278,647,982
Silver	43,957,430	51,150,462	46,861,608	54,529,870
Total		270,409,500		333,177,852

MELTS OF GOLD AND SILVER FOR INGOTS MADE AND CONDEMNED, 1895 AND 1896.

The following table exhibits the number of melts for ingots made and condemned at the coinage mints and the percentage of finished coin produced from the gold and silver ingots operated upon during the fiscal years 1895 and 1896:

NUMBER OF GOLD AND SILVER INGOTS MADE AND CONDEMNED AND PERCENTAGE OF FINISHED COIN PRODUCED FROM INGOTS OPERATED UPON AT EACH OF THE COINAGE MINTS 1895 AND 1896.

Coinage mint.	Fiscal year 1895.					
	Melts of gold ingots.		Percentage of finished gold coin produced from ingots operated upon.	Melts of silver ingots.		Percentage of finished silver coin produced from ingots operated upon.
	Made.	Condemned.		Made.	Condemned.	
Philadelphia	459	30	46.4	1,455	30	47.2
San Francisco	717	1	56.5	3,099	15	50.6
New Orleans	36	6	47.6	688	3	54.3
Total	1,212	37		5,242	48	

Coinage mint.	Fiscal year 1896.					
	Melts of gold ingots.		Percentage of finished gold coin produced from ingots operated upon.	Melts of silver ingots.		Percentage of finished silver coin produced from ingots operated upon.
	Made.	Condemned.		Made.	Condemned.	
Philadelphia	614	1	49.5	3,876	7	48.9
San Francisco	736	1	56.3	1,256	17	52.6
New Orleans	4	1	(a)	592	4	51.5
Total	1,354	3		5,724	28	

a No gold coinage.

HISTORY OF THE MOTTO "IN GOD WE TRUST."

From the records of the Department it appears that the first suggestion of the recognition of the Deity on the coins of the United States was contained in a letter addressed to the Secretary of the Treasury, Hon. S. P. Chase, by the Rev. M. R. Watkinson, minister of the gospel, Ridleyville, Pa., under date of November 13, 1861, which was as follows:

RIDLEYVILLE, PA., *November 13, 1861.*

DEAR SIR: You are about to submit your annual report to Congress respecting the affairs of the national finances.

One fact touching our currency has hitherto been seriously overlooked. I mean the recognition of the Almighty God in some form in our coins.

You are probably a Christian. What if our Republic were now shattered beyond reconstruction? Would not the antiquaries of succeeding centuries rightly reason from our past that we were a heathen nation? What I propose is that instead of the

goddess of liberty we shall have next inside the 13 stars a ring inscribed with the words "perpetual union;" within this ring the all-seeing eye, crowned with a halo; beneath this eye the American flag, bearing in its field stars equal to the number of the States united; in the folds of the bars the words "God, liberty, law."

This would make a beautiful coin, to which no possible citizen could object. This would relieve us from the ignominy of heathenism. This would place us openly under the Divine protection we have personally claimed. From my heart I have felt our national shame in disowning God as not the least of our present national disasters.

To you first I address a subject that must be agitated.

M. R. WATKINSON,
Minister of the Gospel.

Hon. S. P. CHASE,
Secretary of the Treasury.

Under date of November 20, 1861, the Secretary of the Treasury addressed the following letter to the Director of the Mint:

TREASURY DEPARTMENT, *November 20, 1861.*

DEAR SIR: No nation can be strong except in the strength of God, or safe except in His defense. The trust of our people in God should be declared on our national coins.

You will cause a device to be prepared without unnecessary delay with a motto expressing in the fewest and tersest words possible this national recognition.

Yours, truly,

S. P. CHASE.

JAMES POLLOCK, Esq.,
Director of the Mint, Philadelphia, Pa.

It was found that the act of January 18, 1837, prescribed the mottoes and devices that should be placed upon the coins of the United States, so that nothing could be done without legislation.

In December, 1863, the Director of the Mint submitted to the Secretary of the Treasury for approval designs for new 1, 2, and 3 cent pieces, on which it was proposed that one of the following mottoes should appear: "Our country; our God;" "God, our Trust."

The Secretary of the Treasury, in a letter addressed to the Director of the Mint, under date of December 9, 1863, uses the following language:

I approve your mottoes, only suggesting that on that with the Washington obverse the motto should begin with the word "Our," so as to read: "Our God and our country." And on that with the shield, it should be changed so as to read: "In God we trust."

An act was passed April 22, 1864, changing the composition of the 1-cent piece and authorizing the coinage of the 2-cent piece, the devices of which were to be fixed by the Director of the Mint, with the approval of the Secretary of the Treasury; and it is upon the 2-cent bronze piece that the motto "In God we trust" first appears.

The act of March 3, 1865, provided that in addition to the legend and device on the gold and silver coins of the United States it should be lawful for the Director of the Mint, with the approval of the Secretary

of the Treasury, to place the motto "In God we trust" on such coins as shall admit of the inscription thereon. Under this act the motto was placed upon the double eagle, eagle, and half eagle, and also upon the dollar, half and quarter dollar in the latter part of 1865.

The coinage act of February 12, 1873, provided that the Secretary of the Treasury may cause the motto "In God we trust" to be inscribed on such coins as shall admit of such motto.

This is a brief history of the motto "In God we trust," as shown by the records of the Department.

COINAGE ACT OF 1873.

In the Appendix (LIV) will be found a documentary history of the coinage act of February 12, 1873, frequently referred to by the public press and in discussions as the act that demonetized silver in the United States. Since, however, the legal-tender character of the silver dollars coined previous to its passage was not taken away from them by the provisions of that act, it can not be properly said that silver was demonetized by it. All that the act did was to omit the silver dollar from the list of coins thereafter to be coined. The demonetization of silver was not, therefore, effected by the act of February 12, 1873, but by section 3586 of the Revised Statutes of the United States, adopted June 22, 1874, which reads: "The silver coins of the United States shall be legal tender, at their nominal value, for any amount not exceeding five dollars in any one payment."

The last general revision of the coinage laws prior to 1873 was made by the act of January 18, 1837, and the necessity of a revision was apparent to all persons conversant with the coinage legislation of the United States.

The Secretary of the Treasury, Hon. George S. Boutwell, in his annual report to Congress for the fiscal year 1869, refers to the subject in the following language:

> The mining and coining of the precious metals is now so large a national interest that it deserves more attention than it has hitherto received. At present there is no bureau or officer in the Treasury Department at Washington charged especially with the management of this great interest. I therefore recommend that provision be made for the appointment of a proper officer to be intrusted with this branch of the public business, under the direction of the Secretary of the Treasury.
>
> The coinage of the country is diminished in amount by the fact that in England and France the mint expenses are much less than with us. It would no doubt have a tendency to prevent the export of the precious metals in the form of bullion if the mint charges were to be reduced or altogether abolished.

In December, 1869, the Secretary of the Treasury requested Mr. John Jay Knox, then Deputy Comptroller of the Currency, to prepare a bill for submission to Congress providing for the revision of the mint and coinage laws of the United States. A rough draft of the bill was

prepared by Mr. Knox, containing in a concise form nearly all the existing legislation then in force relating to the coins of the United States.

The draft as prepared by Mr. Knox was printed and submitted to the officers of the Treasury, including those of the mints and assay offices, and others who had made the subject a study, with the request that the same be examined and returned to the Department "with such notes and suggestions as experience and education should dictate."

The rough draft of the bill was reviewed by those to whom submitted and returned to the Department with such amendments suggested as appeared desirable.

When all the amendments and suggestions had been duly considered, Mr. Knox, with the assistance of Hon. H. R. Linderman, formerly Director of the Mint at Philadelphia, prepared a bill which was transmitted by the Secretary of the Treasury, under date of April 25, 1870, to Hon. John Sherman, chairman of the Senate Committee on Finance.

Under date of June 4, 1870, a resolution was passed by the House of Representatives directing the Secretary of the Treasury to furnish copies of all correspondence between the Department and officers of the different mints and assay offices, and other persons, relating to the bill as submitted to the Finance Committee of the Senate.

Copies of the correspondence called for by the resolution were transmitted by the Secretary of the Treasury to the Speaker of the House (Hon. J. G. Blaine) under date of June 25, 1870.

From the date of its introduction in the Senate the bill was printed, by order of Congress, with amendments, thirteen times, and was considered during five different sessions by the Senate and House of Representatives. The debates on the bill in the Senate covered 66 pages and in the House of Representatives 78 pages of the Congressional Globe.

The bill was really intended as a codification of the laws relating to matters connected with the details of the mint and assay offices, yet the intention to discontinue the coinage of the silver dollar of 412½ grains was made very evident.

In the bill as originally prepared and submitted to the officers of the Treasury, and others versed in coinage, etc., for suggestions, a silver dollar to contain 384 grains of standard silver was proposed, which was to be a legal tender to the amount of $5 in payment of all dues except duties on imports. The proposed discontinuance of the silver dollar of 412½ grains was expressly set forth by Mr. Knox in his report to the Secretary of the Treasury which accompanied the bill proposed when transmitted to the chairman of the Senate Committee on Finance.

The following table shows the steps by which the act of 1873 became a law:

Proceedings.	Senate.	House.
Submitted by Secretary of Treasury	Apr. 25, 1870	
Referred to Senate Finance Committee	Apr. 28, 1870	
500 copies printed	May 2, 1870	
Submitted to House		June 25, 1870
Reported, amended, and ordered printed	Dec. 19, 1870	
Debated	Jan. 9, 1871	
Passed by vote of 36 to 14	Jan. 10, 1871	
Senate bill ordered printed		Jan. 13, 1871
Bill reported with substitute and recommitted		Feb. 25, 1871
Original bill reintroduced and printed		Mar. 9, 1871
Reported and debated		Jan. 9, 1872
Recommitted		Jan. 10, 1872
Reported back, amended, and printed		Feb. 13, 1872
Debated		Apr. 9, 1872
Amended, and passed by vote of 110 to 13		May 27, 1872
Printed in Senate	May 29, 1872	
Reported, amended, and printed	Dec. 16, 1872	
Do	Jan. 7, 1873	
Passed Senate	Jan. 17, 1873	
Printed with amendments		Jan. 21, 1873
Conference committee appointed.		
Became a law February 12, 1873.		

COUNTERFEITING UNITED STATES SILVER COINS.

Every precaution is taken to guard against the counterfeiting of our coins, and to see that the pieces stamped by our mints are within the limits of tolerance, both as to weight and fineness. From every delivery of coin by the coiner at any of the mints two pieces are taken indiscriminately and sent to the Bureau of the Mint, where they are weighed and assayed. In addition to this, there are taken to be tested by the annual assay commission 1 piece from each 2,000 pieces or fractional part of 2,000, and none of the coins so far tested by the Bureau or the annual assay commission have been found outside of the limit of tolerance, either as to the weight or fineness.

The mere fact, therefore, that a coin in circulation is outside these limits is presumptive evidence of its being counterfeit. But this is not all. There is no possibility by which a coinage die of the United States can escape the custody of its officers. All such dies are manufactured by the engraver of the mint at Philadelphia, and a record of them is there kept. They are all numbered and are furnished to the mints at San Francisco and New Orleans only upon requisitions of the superintendents of the said mints on the Director of the Mint. They are required to be returned to the Philadelphia Mint at the close of the year, when they are defaced and destroyed in the presence of its superintendent, engraver, and assayer.

Yet evidence is not wanting that the silver coins of the United States are being counterfeited by the manufacture of pieces differing so little from the genuine ones in size, weight, fineness, devices, and general appearance that their fraudulent character can be detected only by an assay. In some cases, if not in a majority, the fineness and the amount of pure metal in the counterfeit pieces are higher than in similar silver pieces issued from the mints.

The following statement shows the results of some assays of these illegal coins, made in the laboratory of the Bureau of the Mint:

Denomination.	Weight.	Fineness.	Difference in weight from genuine coins.	Difference in fineness from genuine coins.
	Grains.	*Grains.*	*Grains.*	*Thousandths.*
Half dollar	192	867.5	*a* 0.9	*a* 32.5
Half dollar (1859)	197.41	918.6	*b* 5.41	*b* 18.6
Half dollar	196.35	920.4	*b* 3.45	*b* 20.4
Dollar	416.05	941	*b* 3.55	*b* 41

a Under. *b* Over.

From 1853 to 1873 the weight of the half dollar was 192 grains; in 1873 it was raised to 192.9.

The best executed of these pieces is the half dollar, weighing 192 grains, of the fineness of 0.867½, which has been put in circulation both East and West. No one except those who are used to examining coins would be likely to detect any difference between it and a genuine piece. The same may be said of all counterfeit pieces whose weight differs from the legal weight by only 4 or 5 grains and whose fineness does not depart largely from that required by law.

At the prevailing price of silver the nominal or face value of our silver coins is about double their bullion value. This constitutes a great temptation to the unlawful stamping of such coins by unscrupulous persons, affording them, as it does, an opportunity to place in circulation, at a profit on the material employed of 100 per cent, spurious pieces containing as much or even more pure metal than those issued from the mints.

This is a great danger to which the under-value coins of all countries are now exposed and from which those minted by the Netherlands for its colonies, and especially Java, have suffered greatly, as will be seen from the following extract from the Berlin Börsen-Zeitung of a recent date:

The counterfeiting of silver coins on a large scale by producing perfectly and in every detail exact imitations of the legal coins has been actually proven. It was pointed out long ago that the great depreciation of silver would lead to the fraudulent manufacture of silver coins which could in no way be distinguished from genuine ones and that this species of counterfeit would yield a profit of 100 per cent. There were a great many indications that such counterfeit coinages would be made. Even the statistics of silver was such an indication, for the small market for the total silver product was startling. It was long a matter of surprise in Holland

that the Dutch possessions in India, despite their increasing trade, drew no silver money from the mother country, but on the contrary continually shipped silver money to it. The Dutch colonies have the same currency as Holland; the coinage of silver is suspended in the Netherlands, but the old silver coins still circulate at their former full silver value. Now, counterfeits of 2½-gulden pieces have been discovered in the following manner: There are in circulation pieces which can be distinguished from the genuine neither in size nor weight nor fineness; nor is there anything in the stamping by which they can be distinguished from the genuine coins. It is only on the edge that certain deviations, impossible in genuine coins, are found.

The attention of the Dutch Government having been called thereto, it ascertained that the 2½ gulden pieces were being counterfeited on a large scale in eastern Asia and were smuggled into Java from China. The frontiers were carefully watched, and the counterfeits have already been seized by the cask. The east Asiatics use in their counterfeiting, stamps that have no inscription on the edge; the inscription on the edge is imitated by hand. This is the cause of the deviations that have been observed in individual coins, the negligence of the counterfeiter causing a mistake to slip in occasionally. Whether other silver coins are counterfeited in eastern Asia the information received which is official does not say, but it has been proven that English coins also have been counterfeited. The data used by Dr. Arendt in his pamphlet against the president of the Imperial Bank gave occasion for the collection of material on this subject in England. As a result, two shilling pieces were sent from England to Germany, one of which was well known to be a counterfeit. The Berlin experts declared that they could discover no difference between the genuine and the counterfeit piece. This matter has an extraordinary practical importance. It is impossible for trade to do without silver money, but the fraudulent increase of silver money means a serious jeopardizing of the gold standard, all the greater in proportion as silver depreciates.

The silver coins of the United States are no better protected against fraudulent imitations than are those of Holland. As there is no inscription on the edge, the counterfeiter's task is thereby rendered easier and his crime more difficult of detection.

The French 5-franc silver piece bears on the edge the legend "Dieu protège la France" (May God protect France).

But it can no longer be claimed, as it once was, even by competent judges like Professor Jevons, that the lettering on the edge is beyond the skill of the counterfeiter. The most such lettering can do is to lessen the chances of successful fraud.

Perhaps a better safeguard can be discovered, and in view of the danger to which the silver coins of the United States are exposed, and with the design of minimizing that danger, I respectfully recommend that authority be obtained from Congress for the appointment by the Secretary of the Treasury of a commission to have experiments made for the purpose of determining the best means of preventing unlawful imitations of the silver coins of the United States.

MINT PROCESSES OF THE UNITED STATES.

With a view to supplementing the details of the work of the Mint in this publication and at the same time of meeting a legitimate demand on the part of the public for information regarding technic operations

in these institutions, a demand which has greatly increased in recent years, papers descriptive of such processes, and also of the assaying of gold and silver and the preparation of dies, have been prepared for this report. The first, under the title "From mine to mint," after briefly sketching the methods of gold extraction, paying particular attention to the modern chlorination and cyanide processes, describes parting and refining, ingot making, and the work in general of the melter and refiner's department of the mints. The second bears the caption, "Assaying of gold and silver." The third, under the heading "Coinage operations," describes the treatment of ingots after they leave the melter and refiner's department and come to the coiner's to be rolled, annealed, whitened, and stamped. The remaining one bears the caption, "Manufacture of dies." The papers just referred to are preceded by an article on the theory and history of coinage, which serves as an appropriate introduction to them.

THEORY AND HISTORY OF COINAGE.[1]

Coins are pieces of money of a fixed weight, stamped by the authority of government, and employed as a circulating medium; or, as Jevons defines them, "ingots of which the weight and fineness are certified by the integrity of designs impressed on the surfaces of the metal." Their value may be represented by the material of the coins, or may depend to a greater or less extent on the credit of the state. It is represented by the material especially in full-value gold and silver coins, which, when melted into the form of bars, preserve very nearly the value they had before the stamp was obliterated. It depends in part on the credit of the state in the case of coins whose metallic value is inferior to their nominal value, as, for instance, in the "standard" silver dollars of the United States, the 5-franc silver pieces of the Latin Union, the thalers of Germany, since the depreciation of silver, in divisional silver coins, and to a still greater extent in nickel and copper coins. The standard coins of a country are those that have unlimited and unconditional legal-tender power in such country. They should, in order that the monetary condition of the country may be a healthy one, have a metallic value fully equal to their nominal value, and hence at the present day should consist of gold or silver. The requirement that standard coins should be full-value coins is not perfectly fulfilled at the present time in a great many countries. Thus the German silver thalers, the 5-franc silver pieces of the Latin Union, and the United States silver dollars are intrinsically under-value standard coins—that is, coins whose metallic is inferior to their nominal value.

[1] The material of this paper has been derived largely from an article by Professor Lexis on coinage, the fullest and freest use of which has been here made, and is here acknowledged. Other sources drawn upon are Professor Sherwood's History and Theory of Money, Shaw's History of Currency, Jevon's Mechanism of Exchange, McCulloch's Dictionary of Commerce, Roswag on the Precious Metals, etc.

Divisional coins are those whose legal-tender power is limited to a definite and moderate sum. They are intended only for retail trade or to help effect the full payment of sums not round in wholesale trade. They are under-value coins, because their metallic is less than their nominal value, and hence special provisions are made to prevent their immoderate increase.

Trade coins are those to which no legal-tender power is attributed by the country that issues them, and which are therefore neither more nor less than bits of gold or silver whose weight and fineness are guaranteed by the state. Examples of trade coins are the gold kronen provided for by the German monetary treaty of January 1, 1857, the Dutch ducats and Wilhelms d'or, the silver Levantine or Maria Theresa thalers, and the United States silver trade dollar provided for by the act of February 12, 1873, and retired by the act of March 3, 1887. The trade coin of widest circulation formerly, especially in the East, was the Spanish piaster, which has been replaced by the Mexican dollar. These coins were also legal tender at home.

The definitions given of standard and divisional or token coins by Professor Jevons differ somewhat from those given above, which are those of Professor Lexis. Thus Jevons defines a standard coin to be one of which the value in exchange depends solely upon the value of the material contained in it, the stamp serving merely as an indication and guarantee of the quantity of fine metal. "We may," he says, "treat such coins as bullion, and melt them up or export them to countries where they are not legally current; yet the value of the metal being independent of legislation will everywhere be recognized." According to this definition, the silver thalers of Germany, the 5-franc silver pieces of the Latin Union, and the silver dollars of the United States are not standard coins. Thus Lexis's definition makes the distinguishing quality of standard coins their full legal-tender power, while Jevons's attaches that quality to the equivalency of the nominal and metallic values of the coins. The ideal of a standard coin is reached in those pieces in which this equivalency is found united with full legal-tender power as in the gold coins of the United States, England, France, and Germany.

A great many commodities have, at different periods of history, been employed as money. Nations of hunters used the skins of beasts for this purpose. Beaver skins were thus employed in the territory of the Hudson Bay Company. Nations of fishermen used fish, pastoral tribes cattle, and agricultural peoples wheat or some other natural product such as cacao in Central America, tobacco in Virginia and Maryland. All nations have so used ornaments, cloth stuffs, or weapons. It was probably in the form of tools that brass was first used as money. At a later period that metal circulated in the form of bars or ingots and then of discs. Mercury has been used as money among the miners of Mexico, leather in Russia, tin in China, pepper in Abyssinia, rice in the

Philippine Islands, diamonds in India, dried codfish in Newfoundland, eggs in Alpine towns, and oats in Estramadura in Spain. The universal quality to be found in money, therefore, is that it is a commodity possessed of intrinsic value or general utility in a greater or lesser degree. It has never been a mere sign even when in the form of paper, for the paper was always a title deed to a commodity that circulated or had circulated as money to be surrendered on receipt of the money commodity. After having constituted the principal material of coin, copper made way for silver, and in recent times silver has yielded its supremacy to gold.

Gold and silver have long been the monetary metals par excellence. Their beauty of aspect has caused them to be universally sought for; their permanent color and characteristic hardness make them readily recognizable; they are malleable and take an imprint easily; fusible and homogeneous they can be divided without difficulty into parts similar to one another which can be again united together or separated without losing anything of their value; by reason of their rarity they possess a great acquisitive power in a small volume and are thus convenient instruments of the accumulation and transportation of wealth. Lastly, the relative stability of their value allows us to suppose them to possess approximately, for a limited period, a fixed purchasing power with respect to other commodities, and to attribute to one of them the function of a standard.

Copper, on the other hand, has long been subject to considerable variations of price. The average level of prices is, moreover, too low for that metal to have maintained, in modern communities, the prominent place it occupied when general wealth was not so great. Copper has therefore been reduced to the condition of token money.

The intrinsic or metallic value of a coin depends on its weight and fineness, that is, on the proportion in which the precious metal it contains is alloyed with the base metal. The weight and fineness of a coin being known, its fine weight may be determined. The stamp of the state is intended to guarantee the weight and fineness of the coins, so far as the progress made in the coining art makes that possible. Chevalier was of opinion that "that proportion of alloy was best which gave to the precious metals the greatest resistance to abrasion." This is too absolute a formula. Care must be taken that the proportion of alloy does not exceed certain limits. If it were too great it would become necessary, in order to keep the intrinsic or metallic value of the pieces equal to their nominal value, to increase immoderately their volume and their weight. Experiments made at the Paris mint by Mr. Ruau during a number of years have shown that in a general way the resistance to abrasion of alloys of gold and silver increases with the quantity of copper which they contain. Ruau's experiments have demonstrated the falsity of the ideas entertained on this subject ever since the researches of Cavendish and Hatchett in England in

1798, on the superiority of the fineness of eleven-twelfths. Chevalier's formula should, therefore, be modified thus: "The best alloy is that which, in the higher finenesses, offers the greatest resistance to abrasion." Coins whose legal-tender power is limited contain, frequently, more alloy than full legal-tender coins. In France and the Latin Union divisional silver coins have a fineness of 0.835, while the 5-franc silver pieces have a fineness of 0.900. The law of April 6, 1803, had made no distinction between these coins; they had all a fineness of 0.900, and were all full legal tender. In 1864 and 1865, in order to prevent the exportation of French divisional coins which the premium on silver attracted abroad, the fineness of the pieces of 20 and 50 centimes, and of the 1 and 2 franc pieces was lowered to 0.835, and their legal-tender power was limited to 50 francs, or about $10.

In England divisional coins are legal tender to the amount of 40 shillings. They ceased to be full legal tender in 1816. The law of 1816, however, maintained them at 11 ounces 2 pennyweights of pure metal in 12 ounces, which has been the English fineness since the year 1357. But that law requires 66 shillings to be stamped from the pound troy instead of 62. In England, therefore, the weight has been lowered instead of the fineness, but the reason has been the same as in France, viz, to prevent the exportation of the divisional coins.

In the United States divisional coins were full legal tender up to the passage of the act of February 21, 1853, when the half dollars, quarter dollars, dimes, and half dimes (in the ratio of value of 1:14.88 as compared with gold) were made legal tender to the amount of only $5. Previous to that act they were of the same fineness as the silver dollar and exactly proportioned to it in weight. The act of 1853 lowered the weight of the half dollar from 206¼ grains to 192 grains, and that of the quarter dollar, dime, and half dime in proportion, but left their fineness unaffected. At present divisional coins in the United States are legal tender to the amount of $10 in any one payment.

From mediæval times to the almost universal adoption of the metric system, it was customary to use a special system of weights in the coinage. Under Charlemagne the Roman pound of 327 grams or 5,046.264 grains was replaced by a heavier one whose weight, divided into 12 ounces, is generally stated to have been 408 grams or 6,296.256 grains. According to the most recent investigations it is probable that it contained only 370 grams or 5,709.840 grains, and was, therefore, of pretty nearly the same weight as the English troy pound, divided into 12 ounces of 20 pennyweights of 24 grains and containing 5,760 grains. The Troy pound was first introduced in England as a mint weight under Henry VIII, while up to that time the Saxon Tower pound containing 5,400 Troy grains had served in that capacity. On the Continent the principal mint weight was not the pound of 12 ounces, but the mark of 8 ounces, which was one-half of the commercial pound used in weighing ordinary commodities and called in England the

avoirdupois pound. So far as known, the mark, as a silver weight, is first mentioned in English documents of the ninth century. Its local variations were just as great as those of the commercial or trade pound.

The Dutch troy mark of 246.084 grams or 3,797.568288 grains was one of the heavier of the marks, and must not be confounded with the English troy mark. The Parisian mark was the same as that of Troyes, which afterwards came into general use in France. It contained only 244.753 grams or 3,777.028296 grains. The Salzburg mark weighed something over 256 grams or 3,950.592 grains. The heaviest of the marks was the Vienna mark, containing 280.668 grams (about three-fourths of the English pound troy). The Cologne mark was very extensively used. As early as the thirteenth century it was found, with but slight variations, in the Rhenish commercial cities. An imperial decree of 1559 provided that it should be adopted as the universal mint weight and should contain nineteen-twentieths of a Dutch troy mark or 233.780 grams, equal to 3,607.69296 grains. Local Cologne marks were found to weigh 233.72 and 234.34 grams, equivalent to 3,606.76704 grains and 3,616.33488 grains, respectively; and in the new regulation of the system of Prussian weights the Prussian mark was made to consist of 233.8555 grams or 3,608.858076 grains. The mark, as a gold-assaying weight, was divided into 24 carats of 12 grains, and as a silver-assaying weight into 16 loth of 18 grains. After the introduction of the metric system in France, the kilogram was adopted as a mint weight, and it is the present mint weight of all the other States of the Latin Union. The German Monetary Convention of 1857 made the customs pound (Zollpfund) of 500 grams the mint weight, and it has been continued as such in the coinage legislation of the Empire. In recent Austrian and Hungarian coinage legislation the kilogram is the mint weight; in Russia the common pound; in the United States the English pound troy, and for silver divisional coins the gram as well as the troy grain.

The troy pound weight in use in the United States was obtained from England, and is a duplicate of the original standard fixed by the commission of 1758 and confirmed by that of 1838. It is a brass weight of 5,760 grains. It is kept in a safe at the United States mint in Philadelphia.

The weight of the coins was usually determined by providing what number of them should be struck from the alloyed mint weight. This was because of the practical difficulty of putting the exact amount of standard or pure metal into the individual coins. The coiner had to be satisfied in the case of the smaller coins, and in earlier times in that of the larger also, with the agreement of the total weight of the pieces with the mint weight. Hence it is that the picking of the heavier coins out of a large number was strictly prohibited, although to no purpose.

In Germany the fineness of gold was expressed in the number of carats and grains, and that of silver of loth and grains fine in a mark of alloyed metal, gold of 24 carats and silver of 16 loth being considered fine.

In France also gold of 24 carats meant fine gold, and the fineness was expressed in halves, fourths, eighths, etc.; silver of 12 deniers (pence) was fine silver, and a denier was divided into 24 grains. In modern times, in France, Germany, and most other States, the fineness or proportion of pure in standard or alloyed metal is simply expressed in thousandths. England, however, still clings to the old system, in which the fineness of alloyed gold is expressed in carats, 24-carat gold being considered pure; and the fineness of alloyed silver in terms of the troy pound of 12 ounces of 20 pennyweights of 24 grains. But even in England the fineness of gold and silver is not infrequently expressed in thousandths.

Even with the technic appliances and processes of modern times it is not possible to manufacture each individual coin of the absolutely exact weight required, nor the standard metal of the absolutely exact fineness, and hence legislation allows a certain deviation from the legal weight and fineness of the coins. This deviation is called the "remedy" or "tolerance." The tolerance was formerly used as a pretext for the improper diminution of the contents of the coins, and even in very recent times, in France, a profit was made every year by intentionally causing the tolerance to be almost always under. Doubtless the only course justifiable is one in which slight accidental discrepancies in weight or fineness are as apt to run over as under the standard, so that when a large number of coins is placed in the balance, their aggregate weight shall be found to be the exact legal weight. Each bag of coin issued from the mints of the United States contains the full weight called for by law.

The coins of the country in which they are intended to circulate possess an increased utility as compared with bullion, and in most countries where gold or silver is coined on private account, a mint charge to cover the cost of manufacture is imposed. This mint charge, or brassage, as it was formerly called, must not be confounded with seigniorage, which is a profit on coinage made by the Government equal to the difference between the cost of the bullion put in the coin and its (the coin's) nominal or face value.

As coins are gradually abraded by circulation and lose something of their intrinsic or metallic value, it is in accordance with an enlightened coinage policy that the State should make provision for the retirement of the pieces it has issued when their weight has fallen below the limit of tolerated deficiency. The opinion is steadily gaining ground that the loss of weight thus caused should not be borne by the last holder of the coin but by the State as the representative of the whole people, in whose service the abrasion took place. Thus the German coinage

law of 1871 provided that the 10 and 20 mark pieces that had lost more than five one-thousandths of their normal weight should be accepted by the treasuries of the State at their full nominal value; that they should not be reissued, but should be held back for recoinage; also that such abraded coins, if necessary, should be retired from circulation at the expense of the State, and recoined. In Austria-Hungary, also, according to the law of August 2, 1892, the State retires on its own charge all coins which have fallen below the tolerated deficiency of weight. This duty, however, is not imposed on the States of the Latin Union by their monetary convention. As a matter of fact, France retires on account of the State such coins as are no longer fit for circulation, through the agency of the Bank of France. In England, gold coins whose weight has sunk below the tolerated deficiency are defaced when they come to the bank, and the last owner bears the loss. There are, however, withdrawals from time to time, on account of the State, at the nominal value of the coins, as in 1891, of all the gold coins stamped during the reign of Queen Victoria.

In the United States it is provided that any gold coins of the country which are reduced in weight by natural abrasion not more than one-half of 1 per centum below the standard of weight prescribed by law, after a circulation of twenty years, and at a ratable proportion for any period less than twenty years, shall be received at their nominal value by the United States Treasury and its offices, under such regulations as the Secretary of the Treasury may prescribe against fraudulent abrasion or other practices; and that any gold coins in the Treasury of the United States reduced in weight below this limit of abrasion shall be recoined. The loss from abrasion of silver coins falls on the Government.

The retarding of the abrasion of coins is used as the principal argument for alloying the gold and silver to be minted with base metal. Many experts claim, however, that while fine gold and silver lose the sharp outlines of the stamp more rapidly than when alloyed, on account of their greater softness when in the pure state, they do not lose more in weight; and that when alloyed they suffer greater wear and tear than when pure, from chemical causes. It is certain that the intentional addition of base metal to the pure in gold and silver coins was originally an abuse and made to counterfeit coins of pure metal. A great many gold coins, as, for instance, the Rhenish and Westphalian, contained, besides copper, a certain amount of silver.

It is of the essence of every real coin that its genuineness should be attested by the Government. The Greek city States of Asia Minor were, so far as known, the first to establish mints as State institutions, and in this they were soon imitated by the larger State of Lydia. In the Persian Empire the coinage of gold was reserved exclusively to the King, while silver might be coined by satraps, dependent dynasties, and cities. In Rome, after 269 B. C., the coinage was in the hands of officials specially appointed. In the later period of the Republic the right of coinage

was exercised both by the Senate and by certain generals; by the latter at first only in the districts under their military rule, but after Cæsar's time, in the cities also. In the time of Augustus, however, the Senate entirely lost the prerogative of the coinage of gold and silver and retained only the right to coin copper. In the later period of the Empire the right of coinage seems to have been frequently granted to private persons. During the Middle Ages the principle obtained that "all coins in the Roman Empire are the coins of a Roman King; and he who would have them, whether layman or cleric, must obtain them from the Roman Empire and the Roman King." The dukes of the German tribes seem, however, to have exercised the right of coinage without any special royal grant. Such grants were made in the early Middle Ages to the founders of religious houses, and beginning with the eleventh century to temporal magnates, and with the thirteenth to cities also. There thus came to be in Germany a great variety of coins, not only as to the imprint they bore, but also as to the number stamped from the mint unit of weight, and the right of supervision of all coinages which continued in the State was not sufficient to cure the evils resulting from this variety. The right of coinage was also in the hands of citizens of the large towns, who made a profit from the seigniorage under a contract entered into by them with the King.

In France also the right of coinage was possessed by many in the thirteenth century, especially by barons and bishops. In the time of Louis IX there were over eighty who had been granted the coinage prerogative by the King. About this time efforts began to be made, with some success, to strengthen the royal power in coinage matters and to concentrate the coinage in him. Under Louis X the question was agitated of depriving all barons and prelates of the right of coinage, but the agitation resulted only in the drawing up of a list of those entitled to the privilege (twenty-nine) and in stricter provisions regarding the number of pieces to be stamped from the mint unit of weight and the imprint of the coins to be issued by them. Under the succeeding kings the crown purchased from the barons their right of coinage, and as the great vassal estates were gradually added to the royal domain, the unity of the coinage prerogative was reached in France by the end of the fifteenth century.

In England, after the conquest, the coinage prerogative was seriously endangered under Stephen of Blois, who granted the coining privilege to a great many barons, while others simply assumed it. Grants of the right were also made under John. During the period following, the influence of Parliament contributed greatly to the maintenance of the unity of the coinage prerogative.

The real duty of the Government in guaranteeing the weight and fineness of the coins is evidently to insure, in the interest of the whole community, the manufacture of full-value coins. As a matter of fact, however, the financial interests of states or princes came in conflict

with this requirement, and predominated until comparatively very recent times. Princes too frequently debased the coins of their domains, to their own profit, but to the ruin of the people. But whenever the coinage was debased an effort was made to preserve their original nominal value. This effort was made in order to realize a profit equal to the difference between the nominal value and the metallic or intrinsic value of the coins, and those possessed of the coinage prerogative in all subsequent ages have been so powerless to resist this temptation that it has been seriously questioned whether coinage by the state has not, everything considered, been productive of more mischief than of good, and whether the Chinese, who have used the precious metals by weight only, have not acted more wisely than we. The continued diminution of the contents of the specie-thaler in Germany led, in 1770, to the introduction of the bar standard by the Bank of Hamburg, and the idea of its introduction was first suggested by the example of the Chinese which was deemed worthy of imitation. In the Middle Ages, also, large payments were made by weight in gold or silver marks, especially before the more general diffusion of the gold coins stamped in imitation of the Florentine gulden, notwithstanding such payments were frequently prohibited in the interests of the mints.

The profit from coinage was realized in two ways, principally, and these were sometimes employed jointly, firstly, by an artificial depression of the commercial value of the bar metal by means of limitations of trade in the same, resulting in a purchase monopoly in favor of the mints, while the coins stamped by these institutions were made to serve as far as possible as the exclusive instruments of purchase and payment; secondly, by the adhesion to a definite ideal unit of value or one represented by a real coin and by endeavoring to create an enhanced credit value of the pieces by measuring the under-value coins by that unit.

The first method constitutes the normal manner of collecting revenue by means of the seigniorage. When, for instance, the French aignel of 1321, 59⅛ pieces of which of the nominal value of 1 livre were stamped from a mark of fine gold, while the legal price of the mark was only 58 livres, the coinage charge and seigniorage amounted to 1⅛ livres, or nearly 2 per cent. In principle this is the same course now pursued by the French mint, inasmuch as it pays only 3,437 francs for a kilogram of gold, while it coins 3,444.44 francs out of it; but the difference—7.44 francs—amounts to only about 2.2 per thousand of the latter sum and represents only the actual cost of coinage. But during the Middle Ages a seigniorage of 2 per cent (inclusive of the cost of coinage, which was then much higher than an present) was considered low, and in the case of gold coins it sometimes amounted to 5 and even 10 per cent.

In the case of silver pieces, in the period of greatest debasement of the coins in France the difference between the number of coins required by the law to be stamped out of a mark of pure silver and the legal

price to be paid for a mark in such coins amounted sometimes to 50 per cent of the former sum. So large a seigniorage could of course be maintained only for a short time and by peculiar operations, but a coinage profit of 10 to 15 per cent might still be realized in the fourteenth and fifteenth centuries by a skillful use of the monopoly of the purchase of silver and of coinage even in the manufacture of the larger silver coins. The principal measures employed to attain this end were the following: If gold or silver mines were worked in the mint domain the right of preemption of the pure metal obtained therefrom, even from the mines owned by private parties, was claimed by the mint, and had to be sold to it at a fixed price. The mint then stamped from a mark of gold or silver a larger sum than it had paid for the same. Where the mint domain had no mines the mint lord endeavored to make a profit from the coinage by providing that all imported gold and silver, whether in the form of bars, coin, or old material, should first be sold to the mint or to certain bullion brokers, who should purchase it only at the legal price. The circulation of foreign coins was strictly prohibited; they were required to be exchanged for coins of the mint domain and to pay the seigniorage. In no market could business be transacted except with the coins stamped by the power that controlled the price of the precious metals, and foreign merchants were, therefore, obliged to have their money changed, with a deduction for the seigniorage.

This seigniorage was in reality a tax on trade of a peculiar kind, not like the excise or customs duties on commodities, but on the media of circulation. It was permissible to use bar silver as a purchase medium on condition that a duty equal to the seigniorage was paid for the privilege. The compulsory exchange of coins referred to above and the collection of seigniorage connected therewith was also required when there was less reason for it than in ordinary trade. Thus it was required in Germany whenever there was a transfer of the ownership of the coinage privilege, but frequently without such transfer, simply to exploit that privilege. To further insure the monopoly value of the coins, the goldsmith industry was strictly regulated. Goldsmiths might not purchase more gold or silver than they needed in their business, might not pay for the precious metals more than the price legally fixed, nor procure them by the melting down of the coins. Sometimes, in order that coinage material might flow to the mints in greater quantities, goldsmiths were strictly forbidden to manufacture larger articles of the precious metals. Thus by an ordinance of 1310 they were required to make no gold or silver plate during the space of a year, without the permission of the King, and according to an order of 1322 only silver plate not over 1 mark in weight. Church articles were excepted from this order.

The import and export of the precious metals and of coins in the Middle Ages was also regulated more with reference to the coinage

privilege than in accordance with the mercantilistic views that prevailed in some places. Foreign coins could be imported only to be melted down. The export of bullion, as well as of gold and silver plate, was greatly limited by the French ordinances. On the other hand, the exportation of coins of a certain kind, especially deteriorated ones, was expressly allowed.

The progressive increase of money as a medium of exchange favored the employment of the second method of utilizing or exploiting the coinage privilege, which consisted mainly in this, that existing debts payable in money might be discharged by virtue of legal enactment in certain definite coins at the nominal value ascribed to such coins. These coins, even when not intrinsically full value, were therefore given full legal-payment power, not only to the public treasury but to everyone who had a money claim against another. The debasement of the coinage was to mediæval princes analogous to the financial résource possessed by modern states in paper money; but so long as trade by money and public credit was still in a low stage it was more difficult to keep coins 20 to 30 per cent above their intrinsic value than it is to-day to keep at par intrinsically almost worthless paper.

The depreciation of the coinage may be most plainly followed in France. Philip the Fair began his debasement of the coin formally as a credit operation by making a solemn promise, in which he had the support of the Queen, that he would subsequently redeem the light coins at their full nominal value, but this was never done. As a general rule, however, the debasement of the coin was defended on the false principle that the livre was an ideal unit of value represented by the coins, independently of their intrinsic value. Hence several ordinances provided that all accounts should be kept only in livres—that is, that the unit of account should be 20 sols, or 240 deniers or pence, and not in quantities by weight of gold or silver or in any definite kind of coins. The undervalue coins were thus given a definite nominal value and had to be received by creditors at such value. Wages and certain retail prices probably did not always immediately rise in proportion to the debasement of the coins, but in wholesale trade a rise in prices could not be prevented by any prohibitions. The effect of the debasement of the great mass of coins that circulated in ordinary trade was, in the main, the same as is manifested in our days by irredeemable paper with forced currency, viz, a premium on the precious metals, especially on gold coins and the standard silver coins. When the coins had been lessened in value by a series of debasements to the very lowest point a sudden return was made to heavier pieces; the existing light coins were withdrawn or simply lowered to a value equal to their metallic value. At the same time, however, it was usual to issue an ordinance to regulate the payment of debts, but no such ordinance was issued when the coins were debased. The payment of debts in heavy coins which had been contracted in light ones was thus

prevented; permanent incomes and, in general, all sums which had to be paid for several successive years were always required to be made in the legal money of the time of payment, at its nominal value. Another period of confusion in the coinage which resembled that of the fourteenth century occurred in France in the last years of the reign of Louis XIV.

The idea that the coinage prerogative should not only be productive of no profit but should even be a source of expense to the State was far from occurring to the minds of men in those distant days. This higher view of the right of coinage was first expressed in England, where, in 1666, the gratuitous coinage of the gold and silver brought to the mint was introduced, and where no compensation was asked by the State for the expense it had to undergo for the coinage.

A retirement and recoinage of the abraded coins at the full legal weight at the expense of the State was effected in England in the years 1696–1698. The gratuitous coinage of gold was restored in the United States by the law of January 14, 1875.

The economic effects of the debasement or degradation of the coins may be inferred from the consideration that, the value of all property being estimated and the stipulations in almost all contracts for its purchase, sale, or hire being made in money or coins, no change can take place in the value of such money or coins without subverting these estimates and contracts and enriching the debtor portion of society at the expense of the creditor portion, or vice versa.

"The necessities or extravagance of government," says McCulloch, "forced them to borrow, and to relieve themselves of the incumbrances thus contracted they, in the past, almost universally had recourse to the disgraceful expedient of degrading the coin; that is, of cheating those who lent them money to the extent of the degradation, and of enabling every other debtor in their dominions to do the same. Had the names of the coins been changed when the quantity of metal contained in them was diminished there would have been no room for misapprehension. But although the weight of the coins was undergoing perpetual and their purity occasional reductions, their ancient denominations were almost uniformly preserved, and the people who saw the same names still remaining after the substance was diminished, who saw coins of a certain weight and fineness circulate under the names of florins, livres, dollars, and pounds, and who saw them continue to circulate as such after both their weight and the degree of their fineness had been lessened began to think that they derived their value more from the stamp affixed to them by authority of government than from the quantity of the precious metals they contained.

Originally the coins of all countries seem to have had the same denomination as the weights commonly used in them, and contained the exact quantities of the precious metals indicated by their name. Thus the talent was a weight used in the earliest period by the Greeks,

the as, or pondo, by the Romans, the livre by the French, and the pound by the English; and the coins originally in use in Greece, Italy, France, and England bore the same names and weighed precisely a talent, a pondo, a livre, and a pound. The standard has not, however, been preserved inviolate either in modern or ancient times. It has been less degraded in England than in any other country of Europe, but even there the quantity of silver in a pound sterling is less than the third part of a pound weight," the quantity it contained in 1300, the year of the first debasement undergone by the silver coinage of England, when Edward I reduced the amount of metal in the coins by $1\frac{1}{81}$ per cent, or, in other words, when 20 shillings and 3 pence were coined out of the Tower pound instead of 20 shillings, as previously. This was the beginning of the series of alterations which were carried out in England during the succeeding three centuries, and which terminated only in 1600, when the pound troy of silver was coined into 62 shillings. The period extending from 1543 to 1552 was a time when the fineness of the metal was greatly interfered with. The old proportion of 11 ounces 2 pennyweights of metal to 18 pennyweights of alloy was altered to 10 ounces of metal per pound, then to 6 ounces, or one-half, 4 ounces, or one-third, and finally, in 1551, to 3 ounces of pure metal and 9 ounces of alloy.

Various proposals to depreciate the silver currency have been made since 1600. Says Professor Bastable:

> The most remarkable of the unsuccessful schemes for debasing the standard was that of Loundes, which was advanced in 1695, when the discussions preparatory to the recoinage of 1696 were being carried on. Loundes's plan was to coin the pound troy of standard silver into 77 shillings and 6 pence, thus debasing it 25 per cent. He was resisted by Locke, who, in his Further Considerations Concerning Raising the Value of Money, contributed materially to the development of monetary theory, and the recoinage was mainly in consequence of his efforts, in combination with those of Newton and Montague, based on thoroughly sound principles.

A survey of the condition of the coinage in the various countries of the world at the present day shows that the great economic disturbances and evils, which once had their origin in the debasement of the coins, no longer exist in civilized States, but at the same time reveals the fact that there is in many of them a circulation of undervalue coins—that is, of coins whose metallic is inferior to their nominal value—greater probably, relatively speaking, than in any previous age. Think only of the vast amount of intrinsically depreciated full legal-tender silver coins in the Latin Union, in the United States, in Germany, Austria-Hungary, and Holland. That these undervalue, full legal-tender silver coins circulate as they do, and in the quantities that they do, is evidence of the enormous increase of public credit, which finds a still more striking illustration in the fact that countries like France have been able to keep even irredeemable paper money, with forced currency, almost at its nominal value, and that others are able to put paper money without any special covering, or an insufficient

covering in specie, in circulation, and to keep it of equal value with their metallic money. The so-called Gresham law, that good money and bad money can not circulate side by side, but that the bad drives out the good, does not, therefore, apply where the lack of full intrinsic value of the one kind of money is supplied by a universally acknowledged credit value.

HISTORY OF MODERN COINAGE.

The history of modern as distinguished from ancient coinage may be said to begin with the reformation of the coinage of Rome under Constantine, who introduced the solidus = $\frac{1}{72}$ of a pound = 4.55 grams = 70.2156 grains of gold, of the value of $3.02, as the principal coin. Besides this, he provided for a silver coin of the same weight, which was to have the value of $\frac{1}{1000}$ of a gold pound. After Julian's time, however, the principal piece coined was a silver one of the weight of $\frac{1}{144}$ of a pound, called the siliqua, which was given an increased nominal value, since 24 of them were reckoned equal to a gold solidus.

In the Frankish Empire, under the Merovingians, the gold solidus was the basis of the coinage system, which was then in a rather undeveloped state; yet its metallic contents sank in the second half of the sixth century to $\frac{1}{84}$ of a pound. The silver pence of the Franks had their origin probably in the siliqua, which had become continually lighter. Forty of them were reckoned equal to the gold solidus; but there were also old heavy pence, 12 of which constituted a solidus. In the eighth century gold became rarer and rarer, and a gradual transition to the silver standard was made by the substitution for the gold solidus of a silver unit of account, also called a solidus, divided into 12 pence. This silver solidus subsequently received the name of shilling in England and Germany. At first 300 pence were coined out of a pound of silver; but under Pepin it was provided that 22 solidi of 12 pence each should be stamped out of a pound of silver, and that the coiner should retain 1 solidus out of the 22 as seigniorage.

Pepin, however, soon adopted a heavier standard, the 20-shilling standard, which was further improved under Charlemagne by his making the basis of the coinage a still heavier pound, containing probably 370 grams, or 5,709.840 grains, the mint weight, and providing that 240 pence, or 20 solidi of account, should be stamped out of it. Of Charlemagne's system, Professor Sherwood says that it was the direct successor of an old Roman system of coinage which then prevailed. Its basis was a pound of silver divided into 240 pence. Charlemagne rather debased the Roman standard—that is, he made the pound of silver about one-tenth less than the old Roman pound of silver had been, but he kept the system of 240 pence in the pound, and this system was introduced with more or less success into what is now France and what is now Germany.

Charlemagne's system has remained, as to form, up to the most recent period, the basis not only of the countries of his Empire but

also of England. Indeed, England is the country, as already remarked, in which the pound of 20 shillings and 240 pence has lost least in intrinsic value. Originally, indeed, it was not the Carlovingian but the Saxon pound, lighter by about one-sixteenth. But even the English unit of account could not escape the fate of gradual debasement; the pound weight became a pound tale—i. e., a sum of 240 pence in the coins then existing—and the latter were diminished several times in weight after the year 1300, while their fineness still remained a high one ($11\frac{1}{10}:12$).

After the time of Henry VIII came a period of coinage debasement which culminated in 1551. But a thorough reform of the coinage was effected in 1560 under Elizabeth. The first large coinages of gold in England were made under James I, and from the time of his accession until the death of William III in 1701, they amounted to £15,764,357. Silver, however, was still the principal standard metal, and in 1695 another attempt was made to reform the currency by the recoinage of the silver pieces, most of which had been abraded and clipped. While this attempt was making, the coinage of gold, with an exception in favor of the African Company, was prohibited. The new full-weight silver coins were soon exported, and the reduction of the current value of the guinea in 1717, on the advice of Newton, did not suffice to arrest the outflow of silver. In 1774 the gold standard in England achieved an almost complete victory by the act of 14 George III, cap. 42, which provided that silver coins not of full weight (and there were no others then in circulation) need not be accepted in payments of more than £25 except by weight (standard silver being 62 pence per ounce). This provision was renewed several times and made permanent in 1798. As early as 1797, however, the coinage of silver was suspended, and the single gold standard, therefore, in principle, introduced. Its normal operation was, however, prevented by the existence at the time of a paper currency. The law of the 22d of July, 1816, which established the present English monetary system, held fast to the gold standard and introduced it for the first time in history in all its strictness, since it provided that silver pieces should be used only as divisional coin, with a legal-tender power limited to 40 shillings.

While England had the silver standard the largest silver coin actually stamped was the crown, of the value of 5 shillings, with a weight of 464.516 grains and a fineness of 0.925, or a fine weight of 429.677 grains. The guinea, which was first coined under Charles II, had a variable value, rising from 20 to 22 shillings and more. It was subsequently rated at 21 shillings. Its weight was 129.432 grains and, with a fineness of eleven-twelfths, it had a fine weight of 118.651 grains. The law of 1816 substituted for it the sovereign of 20 shillings, which, therefore, represents the old silver pound in gold and weighs $123\frac{17}{163}$ grains, with a fine weight of $113\frac{1}{623}$ grains. The silver coins, being divisional coins, were lessened in weight in the proportion of 62 to 64.

In France the livre of 12 sols, or sous or 240 deniers or pence, remained the unit of account up to the time of the French Revolution, but gradually declined in value to about 19 cents American money—that is, to one eighty-third of its original value. The denier at last could not be coined at all; the liard, equal to one-fourth sou, was the smallest copper coin. After the violent usurpations of Louis XIV and the John Law catastrophe, the coinage system of France from 1726 to the revolution was in a rather stable condition. The principal French silver coin from 1726 to 1793 was the new écu of 6 livres, weighing 29.488 grams, or 455.058816 grains 0.916⅔ fine, with a fine weight of 27.031 grams, or 417.142392 grains. The livre in this écu corresponds almost exactly to the franc of the new French system, which was given its final form by the law of March 28, 1803. By the provisions of that law the franc was to contain 5 grams of standard silver. The ratio of 1 to 15½ between gold and silver was made the basis for the determination of the weight of the gold coins, and at this ratio the legal weight of the 20-franc gold piece was 6.4516 grams, and its fine weight 5.8065 grams, or 89.6059080 grains.

The United States dollar had its origin in the Spanish piaster of 8 reals of Mexican silver, which, in turn, was patterned after the Joachimsthaler. There was properly no coinage in the United States during the colonial period. Maryland had a mint at one time, and one or two of the other States, but they practically amounted to nothing. Massachusetts had one or two issues; but the coins, so far as the United States had coins before the Revolution, were English coins to some extent, and later, Spanish coins that were circulated by Spain in the South American countries and traveled up to the United States. In the early colonial period the different colonies used all sorts of substitutes for coin—for instance, Indian wampum and bullets in Massachusetts, skins and furs in New York, tobacco in Maryland and Virginia. The unit of account was the Spanish milled dollar or piece of eight (pieza de ocho). Up to about 1775, however, accounts were kept in pounds, shillings, and pence—a pound consisting then, as now, of 20 shillings, and a shilling of 12 pence "colonial" or "pound" currency, 133⅓ pounds of which were equal to 100 pounds sterling. Four pounds "colonial currency" were, therefore, equal to 3 pounds sterling. This par of the colonial and the sterling pound was established by the fact that the Spanish piaster, or milled dollar, was worth in the colonies 6 shillings, while in England it was valued at only 4½ shillings. Calculated in accordance with the legal weight and fineness of the Spanish silver piaster (up to 1772, 8½ pieces from the gross Castilian marco 0.909722 fine), the "pound currency" was a quantity of 82.069966 grams, or 1,296.503715 grains of fine silver.

Besides the Spanish milled dollar, there was a variety of other foreign coins in circulation, but in keeping accounts the pound and the shilling come next in order of common usage to the dollar. The method by

which the colonial composite system of current coins was regulated consisted in coinage tariffs, so much in vogue in early European monetary history. Such a tariff, issued in 1750, valued the ounce of silver at 6 shillings 8 pence and the Spanish milled dollar at 6 shillings, the guinea at 28 shillings, and the English crown at 6 shillings 8 pence. In this tariff all foreign coins were valued in proportion to the Spanish piece of eight, it being considered that many and great inconveniences would arise in case any coined silver or gold, or English half pence and farthings, should pass current at any higher rate than in just proportion to that piece. The shilling was stamped by some of the colonies, and constituted a large part of the money in circulation. It, however, varied greatly in value in the different colonies. Thus the Spanish dollar equaled 5 shillings in Georgia; 8 shillings in North Carolina and New York; 6 shillings in Virginia, Connecticut, New Hampshire, Massachusetts, and Rhode Island; 7 shillings 6 pence in Maryland, Delaware, Pennsylvania, and New Jersey; 32 shillings 6 pence in South Carolina. This accounts for the present reckoning of 12½ cents to a "shilling" in New York, Ohio, etc., and of 16⅔ cents in New England and Virginia. The Spanish dollar, with which this comparison was made, was itself not unfrequently below the legal weight, and therefore varied in value If the pieces mentioned in the coinage tariff of 1776 were of full weight, the ratio there established was the English ratio of 1 to 15.21. The ratio for bullion was not materially different.

The tariff of 1776 had been in operation six years when the Colonies began to feel keenly the difficulties caused by the variety of coins constituting their metallic circulating medium, as well as its injurious effects on business and on the methods of keeping accounts. The need of a special American coinage was frequently expressed, and in 1782 (15th of January) Robert Morris, the superintendent of finance, at the request of a committee of the Congress of the Confederation, submitted a scheme for a national coinage and for the establishment of an American mint, which met with its approval. Jefferson, like Morris, recommended the decimal system, but advocated the dollar as the unit. The proposals of Morris and Jefferson were, however, not carried into effect, and the matter remained in this unsettled state until May 13, 1785, when the grand committee on the money unit made its report. The report of the grand committee on the money unit contended that the exchange in the United States should not be more than 15 grains of silver for 1 of gold; that the charge for coinage should be 2½ per cent for gold and a little over 3 per cent for silver; that the unit should be a dollar of 362 grains of pure silver with a multiple gold piece of 5 dollars and decimal aliquot parts. In 1786 the Congress of the Confederation chose as the monetary unit of the United States the dollar of 375.64 grains of pure silver. This unit had its origin in the Spanish piaster or milled dollar, which constituted the basis of the metallic

circulation of the English colonies in America. It was never coined, there being at that time no mint in the United States.

The act of April 2, 1792, established the first monetary system of the United States. The bases of the system were: The gold dollar, containing 24.75 grains of pure gold, and stamped in pieces of $10, $5, and $2½, denominated, respectively, eagles, half eagles, and quarter eagles; the silver dollar, containing 371.25 grains of pure silver. A mint was established. The coinage was unlimited and there was no mint charge. The ratio of gold to silver in coinage was 1:15. Both gold and silver were legal tender. The standard was double. The act of 1792 undervalued gold, which was therefore exported. The act of June 28, 1834, was passed to remedy this by changing the mint ratio between the metals to 1:16.002. This latter act fixed the weight of the gold dollar at 25.8 grains, but lowered the fineness from 0.916⅔ to 0.899225. The fine weight of the gold dollar was thus reduced to 23.2 grains. The act of 1834 undervalued silver as that of 1792 had undervalued gold, and silver was attracted to Europe by the more favorable ratio of 1:15½. The act of January 18, 1837, was passed to make the fineness of the gold and silver coins uniform. The legal weight of the gold dollar was fixed at 25.8 grains, and its fine weight at 23.22 grains. The fineness was therefore changed by this act to 0.900 and the ratio to 1:15.988+. Silver continued to be exported. The act of February 21, 1853, reduced the weight of the silver coins of a denomination less than $1, which the acts of 1792, 1834, and 1837 had made exactly proportional to the weight of the silver dollar, and provided that they should be legal tender to the amount of only $5. Under the acts of 1792, 1834, and 1837 they had been full legal tender. By the act of 1853 the legal weight of the half dollar was reduced to 192 grains, and that of the other fractions of the dollar in proportion. The coinage of the fractional parts of the dollar was reserved to the Government.

The act of February 12, 1873, provided that the unit of value of the United States should be the gold dollar of the standard weight of 25.8 grains, and that there should be coined besides the following gold coins: A quarter eagle, or 2½-dollar piece; a 3-dollar piece; a half eagle, or 5-dollar piece; an eagle, or 10-dollar piece, and a double eagle, or 20-dollar piece, all of a standard weight proportional to that of the dollar piece. These coins were made legal tender in all payments at their nominal value when not below the standard weight and limit of tolerance provided in the act for the single piece, and when reduced in weight they should be legal tender at a valuation in proportion to their actual weight. The silver coins provided for by the act were a trade dollar, a half dollar, or 50-cent piece, a quarter dollar, and a 10-cent piece, the weight of the trade dollar to be 420 grains troy; the half dollar, 12½ grams; the quarter dollar and the dime, respectively, one-half and one-fifth of the weight of the half dollar. The silver coins were made legal tender at their nominal value for any amount not exceeding

$5 in any one payment. The charge for converting standard gold bullion into coin was fixed at one-fifth of 1 per cent (abolished by the act of January 14, 1875). Owners of silver bullion were allowed to deposit it at any mint of the United States to be formed into bars or into trade dollars, and no deposit of silver for other coinage was to be received. Section 2 of the joint resolution of July 22, 1876, recited that the trade dollar should not thereafter be legal tender and that the Secretary of the Treasury should be authorized to limit the coinage of the same to an amount sufficient to meet the export demand for it.

The act of March 3, 1887, retired the trade dollar and prohibited its coinage. That of September 26, 1890, discontinued the coinage of the 1-dollar and 3-dollar gold pieces. The act of February 28, 1878, directed the coinage of silver dollars of the weight of 412½ grains troy, of standard silver, as provided in the act of January 18, 1837, and that such coins, with all silver dollars theretofore coined, should be legal tender at their nominal value for all debts and dues, public and private, except where otherwise expressly stipulated in the contract. The Secretary of the Treasury was authorized and directed by the first section of the act to purchase from time to time silver bullion at the market price thereof, not less than $2,000,000 worth nor more than $4,000,000 worth per month, and to cause the same to be coined monthly, as fast as purchased, into such dollars. A subsequent act, that of July 14, 1890, enacted that the Secretary of the Treasury should purchase silver bullion to the aggregate amount of 4,500,000 ounces, or so much thereof as might be offered, each month, at the market price thereof, not exceeding $1 for 371.25 grains of pure silver, and to issue in payment thereof Treasury notes of the United States, such notes to be redeemable by the Government, on demand, in coin, and to be legal tender in payment of all debts, public and private, except where otherwise expressly stipulated in the contract. The act directed the Secretary of the Treasury to coin each month 2,000,000 ounces of the silver bullion purchased under the provisions of the act into standard silver dollars until the 1st day of July, 1891, and thereafter as much as might be necessary, to provide for the redemption of the Treasury notes issued under the act. The purchasing clause of the act of July 14, 1890, was repealed by the act of November 1, 1893. The act of June 9, 1879, made the subsidiary silver coins of the United States legal tender to the amount of $10. The minor coins are legal tender to the amount of 25 cents.

An account of the monetary systems of the principal countries of the world will be found at the end of this volume.

FROM MINE TO MINT.

By D. K. TUTTLE, Ph. D.,
Melter and refiner of the United States Mint at Philadelphia.

The great increase in the production of gold in recent years is not attributable alone to the discovery or opening of new fields. It is largely due to the use of better business methods in the working of time-honored processes, but more largely to the

introduction of new means of extraction, which, whether worked alone or in combination with the old, make it possible to treat with profit immense quantities of low-grade ores in known deposits or of so-called refractory ores which have hitherto defied profitable treatment.

If space permitted, it would be interesting to take a glance at the whole field of gold getting, but it is hoped that some notes on the later and perhaps the coming methods of extraction may prove useful.

It is likely that the stamp mill and amalgamator process will survive as long as we have free milling ores. But the day of letting rich tailings go to waste has passed or is rapidly passing away.

The Robinson mine in South Africa furnishes an admirable illustration of what modern methods can accomplish in supplementing the stamp mill.

In 1893, 94,842 tons of ore were worked—first by the familiar method of stamping and amalgamation. The yield from the stamps was $1,885,583. The tailings instead of being allowed to go to waste were passed over Frue vanners, by which sulphurets to the amount of 2,714 tons were obtained. These concentrates were roasted, treated by chlorination, and yielded $219,514.

The tailings from the concentrators, amounting to 55,200 tons, were passed on to the cyanide works, where gold to the amount of $289,722 was recovered. A statement of these returns would show:

	Per ton.
From mill	$19.88
From chlorination	2.32
From cyanide	3.05
Total	25.25

It will be seen that more than 20 per cent of the returns came from the tailings treated by modern processes, and that these added 27 per cent to the output from the stamps. These results should be very suggestive to mine owners.

It would be a platitude to say to any intelligent mining man that no one process is suited to all ores; but it has not been so well understood that no single process is likely to afford the largest possible returns from any one ore.

The concentrates in the case of the Robinson mine were collected at very low cost while the tailings were passing from the stamps to what would have been the dump. Yet they yielded $80.88 per ton by chlorination. The tailings from the Frue vanners cost nothing for crushing, yet they yielded more per ton than some ores profitably treated in this country.

The chlorination process has found its way into quite extensive use in the United States, and much more may be expected from it when, as is hoped, water power expended in the electrolytic decomposition of common salt for the production of chlorine may dispense with the transportation of chemicals to remote regions. This seems to be one of the possibilities of the future.

The limitations of the cyanide process are beginning to be understood, and its possibilities will become more apparent as this knowledge is extended. Its failures are what might have been expected with the experience of to-day. That it has a brilliant future no one can doubt who has kept pace with recent developments. It is suited to but a limited class of ores, yet these are plentiful. The ores of the Mercur mine in Utah would be valueless for treatment by any other known process. It is best suited for silicious or limestone ores, in which the gold is finely divided. It will make a fair extraction from pyritic ores in which oxidation has not begun. It is suited to old tailings weathered and leached by rains, and to new tailings where the leaching is not made too slow by slimes. Any difficulties here are likely to be mechanical ones.

It is not suited to ores carrying coarse gold, as the time required for solution is too long. It has not been successful with ores carrying copper, which seems to have a destructive action on the cyanide solution. Partially oxidized pyritic ores or tailings must be rich enough to pay for a preliminary alkaline leaching.

A comparatively simple chemical examination will determine the treatment best suited for any gold-bearing material, and many an expensive mistake has been made by subjecting a valuable ore to a treatment admirably adapted to some other and quite different mineral deposit.

It is now fully understood and appreciated that oxygen enters as a necessary element in the reaction by which gold is dissolved by potassium cyanide.

Efforts are being made to supplement the cyanide solution with oxidizing chemicals, but while much may be hoped from experiment in this direction there is as yet no assured success to note.

PARTING AND REFINING PROCESSES.

Gold and silver are not found native in a state of purity. Indeed, they seem to "hunt in couples." Our California nuggets contain, on an average, about 88 per cent gold, the balance being chiefly silver. Native silver has been found more nearly approaching purity; but even this contains enough gold to pay for parting. But by far the largest source of silver is the lead and copper ores of the West, in which it occurs accompanied by gold, in small percentage it is true, but very important in value.

The lead ores are smelted to "base bullion," in which the gold and silver are caught. The lead smelter afterwards carries the concentrating process up to the point of doré bars, which are silver carrying gold as its chief impurity. These bars go to the refinery for parting.

The copper minerals of Montana, Arizona, etc., carry silver and gold, and the electrolytic process of refining the crude copper made from these ores is now an enormous industry. In this process the solution and current are so regulated that only pure copper passes over and is deposited on the cathode, while the original plate—the anode—is disintegrated and the impurities fall to the bottom of the tank as a mud, technically known as "slimes." This mud is a veritable drag net of nearly all the impurities known to the metallurgist, containing, besides gold and silver, notably copper, bismuth, antimony, arsenic, lead, sulphur, selenium, and tellurium. After a more or less successful purification in the copper works, the resulting bullion is subjected to one of the parting and refining processes described below.

Some gold ores are associated with platinum and platiniridium. Iridosmine is rather abundant in the auriferous beach sands of northern California. Dentists' scrap again contains platinum, tin, and copper. Jewelers' bars, resulting from the melting down of old jewelry, watch cases, etc. (filled and solid), contain nearly all the metals used in the arts.

It will thus be seen that the material to be treated is of the most heterogeneous description and not infrequently special methods have to be adopted. Thus, iridosmine is separated from gold by alloying the latter with sufficient silver to so diminish the specific gravity of the molten mass that the heavy iridosmine grains will settle to the bottom of the crucible. The silver and gold are then carefully poured off and parted by acids, as hereafter described.

METHODS OF PARTING.

Three general methods are in use for parting gold and silver, known as the "nitric-acid," the "sulphuric-acid," and the "electrolytic" process, respectively. The latter is in use in a few private plants, where it gives satisfaction, but it seems to be better adapted to large smelting works, where argentiferous lead is purified, than to Government refineries.

The electrolytic process is said to give satisfactory results only when the bullion to be parted has been refined in a cupel furnace until it contains not over 2 per cent of impurities (lead, copper, bismuth, etc.). None of our mints or assay offices can easily be provided with facilities for such wholesale cupelling operations, and the process has therefore been confined, as stated, to lead-smelting plants. It yields silver of exceptional purity (0.999½), and the estimated output of the few concerns using it is some 10,000,000 ounces fine silver per annum. As it is an interesting process from a scientific as well as industrial point of view, a short description may not be amiss before proceeding to deal with the methods in use at the Government institutions.

ELECTROLYTIC PARTING AND REFINING.

The silver carrying gold and a small percentage of impurities is cast from the cupel into flat plates about 18 inches long, 10 inches wide, and one-half inch thick, weighing about 30 pounds each.

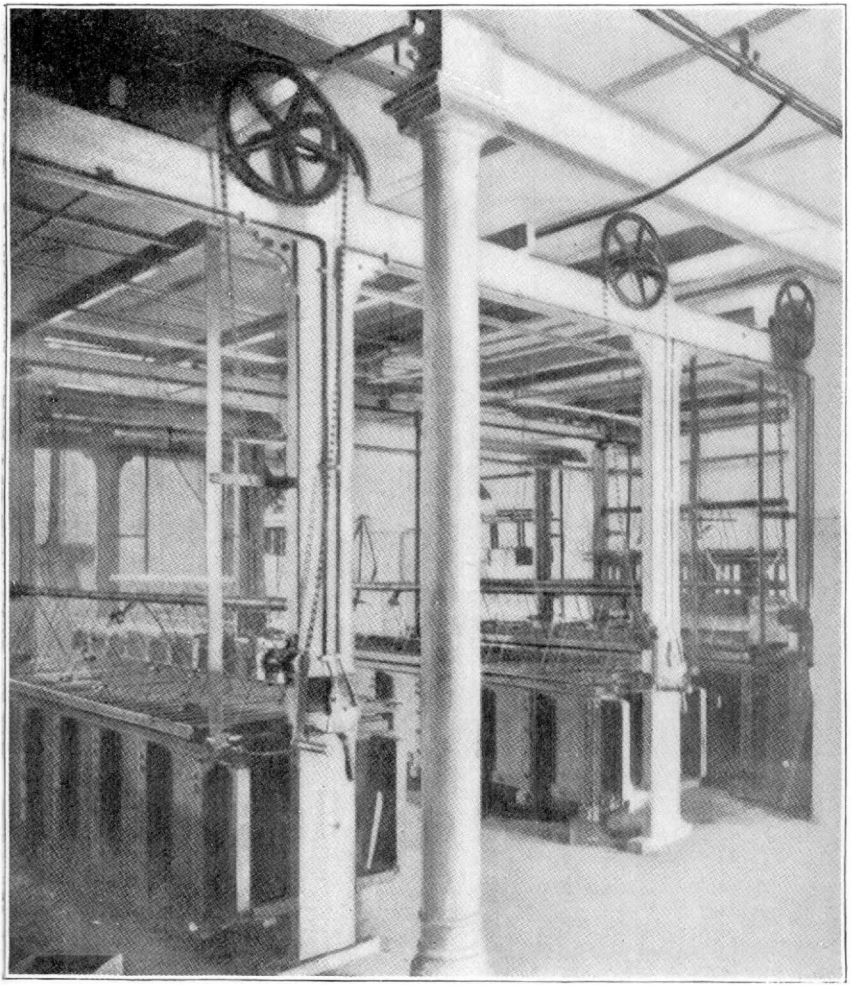
These plates form the anodes, and are suspended by three lugs cast on one of the long sides. They, therefore, hang with the greater length horizontal. Tanks of California redwood planks are very carefully made, 11 feet long by 2 feet wide and 20 inches deep (inside measure). Six partitions are placed crosswise in a tank so as to give seven separate cells or "baths." In each cell three plates or anodes are suspended, alternating with four cathodes. These latter are thin-rolled sheets of pure silver 13 by 20 by $\frac{1}{32}$ inches thick, weighing 50 troy ounces each. The distance between anode and cathode is about 1¾ inches.

Both anodes and cathodes are suspended by conducting wires from copper rods resting on the edges of the tank. Two copper bars traverse these top edges and are connected with the respective poles of the dynamo. The cross rods supporting the plates rest on these bars, but one end of the rod carrying an anode is insulated by a rubber band, while the opposite end of the rod carrying a cathode is insulated in like manner. The current must therefore pass from one conductor to the anodes, through the solution and the cathodes, to the return conductor. It will be seen that the current is divided between these seven cells and that we have 21 anodes connected in *multiple* with 28 cathodes.

A model plant consists of fourteen such tanks containing seven cells each. Ten of these tanks are constantly in circuit, four being in turn cut out for charging, discharging, and possible repairs. These ten tanks are connected in *series*. The dynamo furnishes a current of 180 amperes, with an electro-motive force of 90 volts. Such a current requires 22 horsepower. The total cathode surface is 10 square feet in each tank. There is, therefore, a current density of 18 amperes per square foot of cathode surface. This is high as compared with that used in copper refining, but is purposely so in order that the silver may be deposited in coarse crystals nonadherent to the cathodes. The silver can then be easily brushed off and collected at short intervals. Thus the constant renewal of cathodes is avoided and an important saving effected in the stock of silver carried in the baths.

Each anode is inclosed in a muslin bag, which serves to catch the undissolved metals, which fall as a black slime. In this are found all the gold and bismuth, the greater part of the lead as peroxide, together with some silver and copper. Below this system of anodes, cathodes, and bags in the bath is stretched on a box-like frame a piece of cloth, on which is gathered the deposited silver as it is scraped from the cathodes by wooden "brushes." These brushes straddle the cathodes without touching, and are kept moving to and fro by machinery, and they serve, not only to brush off the silver as fast as it is deposited, thus preventing short circuits, but also to keep the solution uniform by gentle agitation.

The solution is one of silver and copper nitrate, to which about 1 per cent of nitric acid is added. The acid tends to prevent the deposition of copper with the silver, and about 1 pint is added to each bath every twenty-four hours. Three-eighths of 1



ELECTROLYTIC PARTING, MOEBIUS PROCESS.

volt will decompose silver nitrate, while copper nitrate requires 1⅛ volts, and lead nitrate a still higher voltage.

In a slightly acid solution, containing silver, copper, and lead nitrates, the current will not deposit a trace of anything but silver until the lead and copper get to be largely in excess of the silver. It is said that pure silver will be deposited from a solution containing one and one-half times as much copper as of silver. Of course the gradual accumulation of impurities in the bath necessitates its gradual renewal by addition of fresh solution, the silver being precipitated from the portion withdrawn by salt water.

Each tank is cleaned of deposited silver every other day and of gold slimes once a week. A full-sized anode is dissolved in about two and one-half days. The crystalline silver is washed thoroughly with hot water, dried, and melted. The gold slimes are melted, granulated, and parted by acid.

Such a plant as described will produce about 33,000 ounces of fine silver each twenty-four hours.

ACID-PARTING PROCESSES.

Acid-parting processes depend upon the solubility of silver, copper, etc., in an acid which will not attack the gold. Strong sulphuric (oil of vitriol) is such an acid, and nitric acid is another, but their mode of action and the apparatus required are quite different. The use of each will be described in detail.

THE NITRIC-ACID PROCESS.

This is the oldest and until a comparatively recent date the only method in use for parting gold and silver. The first notice we have of its use on a large scale was in the fifteenth century, and proved a very profitable one, by some Germans at Venice, who employed it in extracting gold from Spanish silver, keeping their art a secret. They acquired with their wealth the title of "gold makers" by their mysterious operations.

Parting by nitric acid is conducted on a large scale in much the same manner as an assay of gold bullion is made in the laboratory. It consists of the following operations:

(1) Assorting and proportioning the bullion; (2) granulation of the same; (3) solution of the silver in acid; (4) treatment of the gold residue; (5) precipitation of the silver as chloride; (6) reduction of the chloride by zinc; (7) washing, drying, and melting the parted metals.

It is of course desirable that the bullion should be approximately free from base metals other than copper. Tin, antimony, and arsenic are especially objectionable, the two former not being soluble in nitric acid. They give insoluble oxides, which remain behind with the gold and must be removed in the crucible by suitable oxidizing fluxes. Copper, on the other hand, acts as a substitute for silver in the parting process, being, as it is, readily soluble in nitric acid. When silver deposits are scarce, therefore, such as contain considerable quantities of copper, whether of gold or silver, are not undesirable, although the copper requires more acid for solution than the silver which it replaces.

It was originally thought that the proper proportion for parting was three parts silver to one of gold, hence the name "quartation" given to the process. Experience has shown, however, that a lesser proportion of silver is quite as effective, and that the copper may be considered as silver for parting purposes. The proportion of gold to silver (and copper) used at the Philadelphia mint is 1 to 2½.

The necessary calculations having been made, the deposits are assorted into melts of about 4,000 ounces each, preferably by mingling gold and silver deposits. If the latter are not on hand in sufficient quantity, fine silver is substituted. The "melt" is now brought to fusion in a large crucible, thoroughly mixed, and then by means of a dipping cup is poured into cold water from a height of some 3 feet. The cup is given a peculiar swirling, wavy motion, by which means the thin stream of molten

metal is broken up when it strikes the water into leafy granules and hollow spheres, not unlike golden popcorn in appearance—this to expose as much surface as possible for the action of the acid. These granulations are dissolved in porcelain vessels of about 33 gallons capacity. Twelve such vessels are placed in a large water bath in what is called the "parting house." Provision is made for heating the water surrounding the jars, and a connection from the top of the house to a chimney serves to carry off the acid fumes.

Each jar receives a charge of 190 pounds of granulations and 175 pounds strong nitric acid. When the first strong action has subsided, steam is admitted to the water surrounding the jars. The metal and acid will about half fill the jar. At intervals of twenty minutes the contents are thoroughly stirred with a wooden paddle, the doors on the side of the house being raised for the purpose. The charge is kept boiling gently during six hours, by which time most of the silver will have been dissolved, leaving the gold as a granular sediment. The steam is turned off from the bath, and hot water added to the jars to dilute the strong silver solution. After subsidence of the gold, the clear solution, containing silver, copper, lead, etc., is siphoned off and transferred to the precipitation tank. The jars are again filled with hot water, the contents well stirred, and again allowed to settle. The clear liquid is added to the first, and 50 pounds of fresh, strong acid added to each jar. The boiling is renewed for five or six hours, when washing of the gold by decantation is several times repeated. The gold sediment is now transferred to a lead-lined tub, mounted upon a truck. This tub has placed in it a perforated false bottom, which is carefully covered with cotton cloth, the whole constituting a large colander or movable filter. Water is now passed through the gold until most of the silver has been removed, the wash waters being transferred, as before, to the large tank for precipitation.

From this filter the gold is transferred to cast-iron pots, in which it receives a boiling in strong sulphuric acid, to which a small quantity of niter is added. This treatment extracts an additional portion of silver and materially increases the fineness of the gold. The strongly acid liquor is ladled off into vessels partly filled with water. From this solution the silver and a little gold are periodically recovered as "residues." The gold is thrown from the iron pots into water, washed a number of times by decantation, and then thoroughly sweetened on a portable tub filter, such as has been described. It is now dried and melted. If a sample bar, upon trial, proves to be tough, the melt is now ladled into iron molds, giving bars of some 300 to 400 ounces each. If the trial bar is brittle, the molten mass is fluxed with niter through an "eye" of bone ash. The niter oxidizes lead, antimony, arsenic, sulphur, etc., the products being absorbed by the bone ash cover.

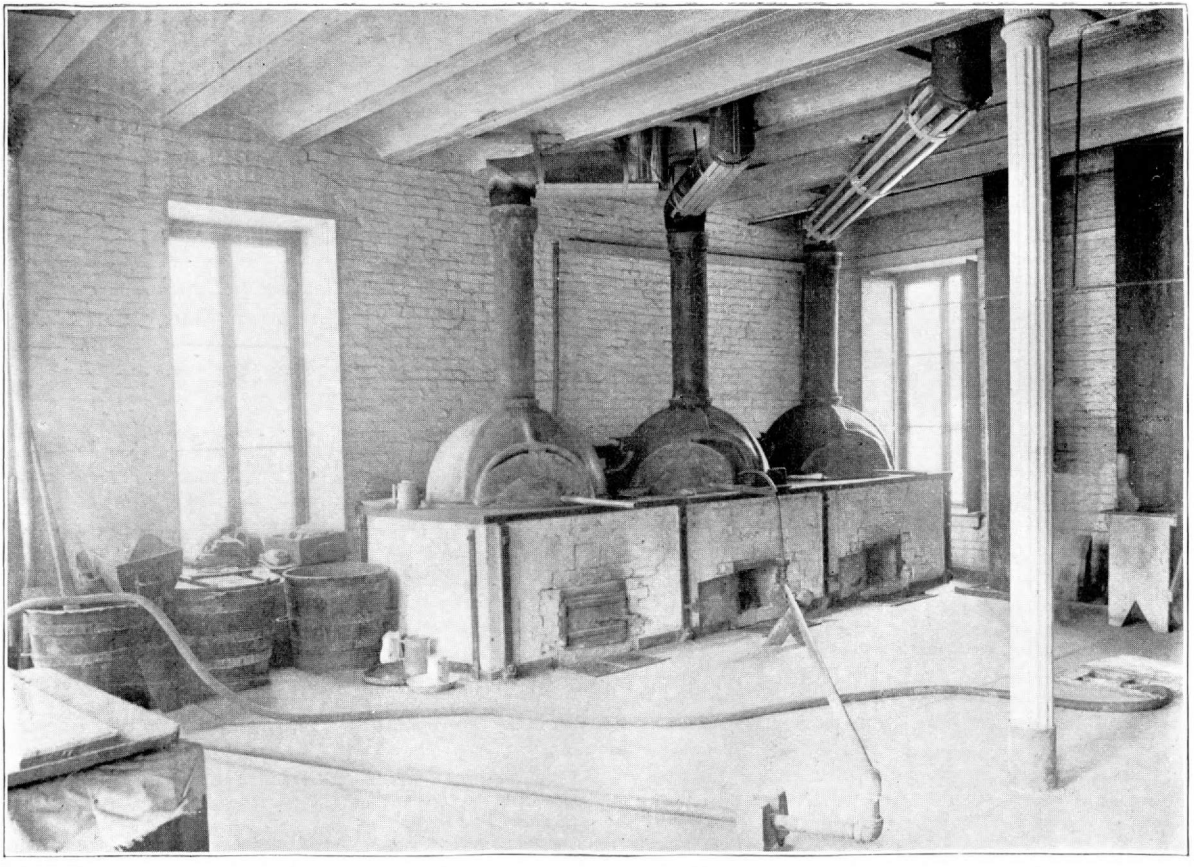
About 6,000 ounces constitute such a melt, and we have some fifteen bars of a fineness of 0.998 or 0.999, and worth, say, $8,000 each.

RECOVERY OF THE SILVER.

The silver solutions, together with the wash waters from the gold treatment described, are transferred to a large precipitation tank having a capacity of some 2,000 gallons. This is never filled to its full capacity, since abundant room must be left for stirring and rousing the contents. Salt water is now run into the silver solution until a test shows that enough has been added to convert all silver present into chloride. An excess is avoided, since silver chloride is slightly soluble in salt water. The contents of the large tub are now drawn off through a filter. This is a wooden tank 6½ feet long, 3 wide, and 1½ in depth, lead lined, and provided with a perforated false bottom. The bottom and sides of this tank are carefully covered with cotton cloths as a filtering medium. The curd-like silver chloride is run into this filter through a large wooden stopcock. The liquid which drains off is returned to the filter until it runs clear, after which it is passed through several traps to the sewer. Fresh water is passed through the chloride until all soluble matters are



DISSOLVING HOUSE—NITRIC ACID PROCESS, U. S. MINT AT PHILADELPHIA. FILTER ON TRUCK IN LEFT VIEW.



DISSOLVING KETTLES, SULPHURIC ACID PROCESS. ASSAY OFFICE, NEW YORK.

removed, when it is allowed to drain. The filter tank is mounted on low wheels for convenience of moving the chloride to the reducing vat. This is again a lead-lined rectangular tank. The silver chloride is transferred to this tank by means of a copper scoop shovel. Hot water is run on, and granulated zinc added in sufficient quantity to reduce the chloride to metallic silver. The addition of sulphuric acid hastens the action and serves to dissolve the slight surplus of zinc which it is necessary to use to insure complete conversion into metallic silver. The reduced silver is now taken out with a copper scoop having a shovel handle and put into a filter colander, such as we described previously when speaking of gold treatment. In this colander the silver is washed with hot water until entirely sweet. It is now ready for compression into solid cakes by hydraulic pressure. These cakes are dried in a current of hot air, when they are ready for melting. This is usually done without fluxes, and the resulting bars have a fineness of 0.998 to 0.999.

THE SULPHURIC-ACID PROCESS.

Thoroughly satisfactory as is the nitric-acid process, so far as its effectiveness is concerned and the high grade of gold and silver which it yields, yet the comparatively high price of nitric acid and the necessity of using either platinum or porcelain vessels led to its being superseded in modern plants by the sulphuric-acid parting process. Diluted sulphuric acid has no action on silver, but the strong acid, when heated, is decomposed by that metal, giving off sulphurous acid and forming silver oxide, which passes into solution in the excess of acid as silver sulphate. If gold is present in moderate percentage, say not to exceed one-third of the whole, strong sulphuric acid will extract the silver and leave the gold as a granular brown sediment. Should the bullion contain anything like one-half gold, the latter metal will protect the silver against acid attack, and the result will be failure. It is, therefore, the business of the refiner to adjust for the melting pot gold deposits with those of silver carrying small quantities of gold, or, failing such, to add fine silver so as to have from two to three parts of silver for each part of gold. Such an admixture is melted in a large crucible, thoroughly mixed, and then, with a "dipping cup," is poured into cold water, as described in speaking of the nitric-acid process.

But the proper adjustment of silver to the gold is not the only point requiring care. Most bullion coming to the refinery contains varying quantities of copper, and this metal works very badly in strong sulphuric acid, although we found that metal the least objectionable one in the nitric-acid treatment. While decomposing the acid with formation of copper sulphate, this latter, unlike the silver sulphate, is insoluble in oil of vitriol, hence, if present in any considerable quantity, copper soon acts as a protector to the bullion and the chemical action either ceases or becomes tediously slow. Besides apportioning the silver to gold, it is necessary, therefore, to so combine deposits that the granulations do not contain more than 6 to 8 per cent of copper.

DISSOLVING THE SILVER.

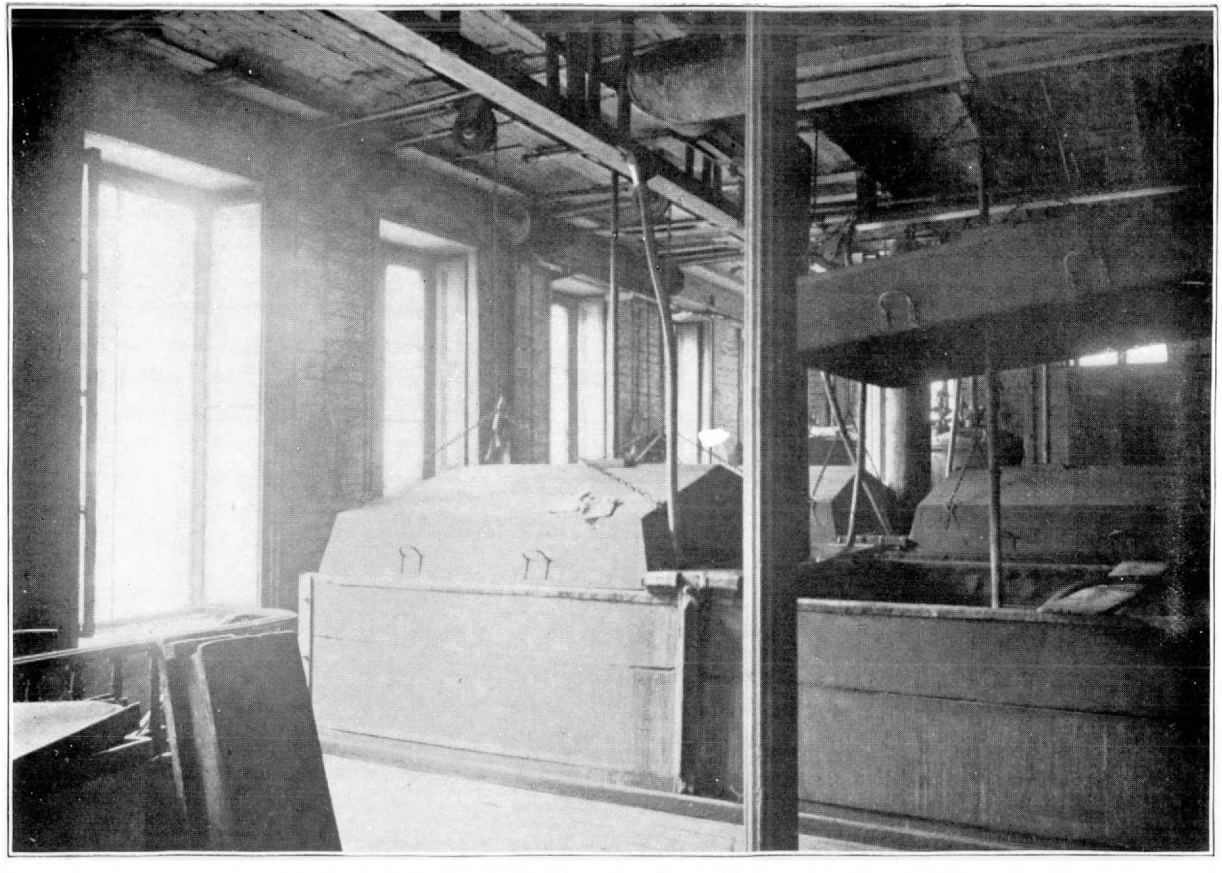
The success of this beautiful process really depends upon the happy observation that while weak sulphuric acid rapidly dissolves iron, yet, if the acid be strong enough, it has no appreciable action—just the reverse of its relations to silver. Cast-iron vessels may therefore be employed. A cast-iron kettle will last for years, during which time hundreds of tons of silver may be dissolved in it by boiling oil of vitriol. Large iron kettles are used, weighing half a ton, mounted over a furnace. Into this a charge of 300 to 400 pounds of the granulated bullion is placed, and covered with three or four times its weight of acid—66 B. Heat is applied, when a lively evolution of sulphurous acid sets in, which, if too violent, must be checked by the addition of a little cold acid and slackening of the fire. This boiling is continued for several hours, during which time the escaping and consumed acids are gradually replaced. When the solution is complete the fire is withdrawn and the contents of

the kettle allowed to quietly settle. A little cold acid is added to aid the precipitation of any suspended gold. Hoods over the kettles carry off the fumes to condensing and suppression apparatus.

The strongly acid solution, while still hot, is siphoned off into the "reducing houses." These are long, rectangular vats lined with lead, and provided with sloping covers like the roof of a house. These covers are hinged to what would be the ridge pole, and are counterbalanced so as to be easily raised. Slabs or ingots of metallic copper are placed on the bottom and sides of these vats, which are then partly filled with cold water. The hot silver solution is then run in. A lively commotion ensues, as will readily be imagined when one recalls the heat evolved by the mingling of cold oil of vitriol with water. In this case the acid is nearly at its boiling point, which is greatly above that of water, and the resulting crackling and spluttering must be seen to be appreciated. The result is a weak solution of silver sulphate, rendered milky by the separation of fine crystals of that salt, the solubility of which is very slight in pure water. The copper immediately begins to precipitate the silver as a beautiful crystalline moss, easily detachable from the plates when the operation is complete. This requires about twenty-four hours. Meanwhile the copper has taken the place of silver, and we have now a strong solution of copper sulphate (blue vitriol). This blue solution is drawn off for crystallization, and the spongy silver carefully transferred to leaching tubs for thorough sweetening with fresh water. The silver, now in the form of minute, flaky crystals, is compacted into cakes by means of hydraulic pressure and these cakes dried in a current of warm air, after which a simple fusion in a black-lead crucible without fluxes gives a bullion 0.998 or 0.999 fine. If silenium or tellurium is present in the bullion, it will pass into solution with the silver and be deposited with it by the copper plates. In this case the spongy silver will be dark colored and the melt will be brittle. It must then be fluxed with niter.

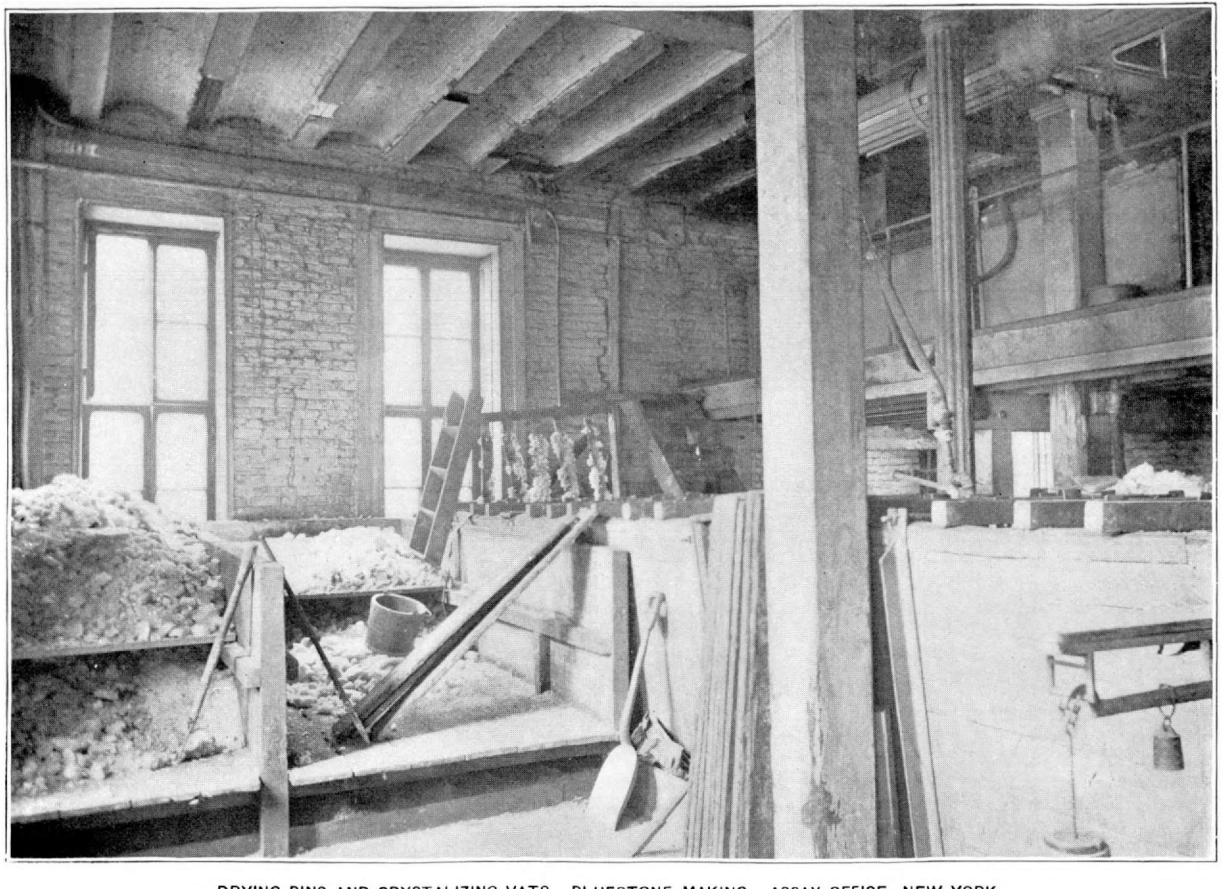
The sulphate of copper is a staple article of commerce, and is carefully prepared for the market. When sold, the proceeds should materially reduce the expense of parting the bullion. But, unfortunately, while the materials for its production, the acid and copper, are purchased out of the fund arising from the collected charges from the depositor, yet the product, blue vitriol, is by present ruling treated as "waste product," the proceeds from which when sold must be turned into the general Treasury instead of the refinery fund.

We left the gold as a sediment in the large iron dissolving kettle. A small quantity of fresh acid is added and the gold then removed to a smaller vessel by an iron ladle, perforated with holes. It is transferred to another iron pot, in which it receives a number of repeated boilings with fresh strong acid. There are not less than five such boilings. The finishing acids are siphoned off and used upon fresh charges of bullion. The gold is now transferred to a tub, in which it is washed first with cold water and then with hot. These washings find their way to the silver-precipitating tanks. It is now transferred to a lead-lined vat mounted upon a truck. This vat has a perforated false bottom, which is carefully covered with cloth, the whole constituting a large movable filter. Water is now passed through the gold in this filter until it is entirely sweet. If the gold is in coarse particles it may be dried and melted without danger of its being mechanically carried off while placing it in the crucible, but if very fine it is compacted into cakes while wet by hydraulic pressure. These cakes are dried, as were those of silver, in a current of warm air, and melted in a graphite crucible. A trial sample is taken to see if the metal is tough. The presence of even small quantities of lead will render the gold brittle, in which case it is fluxed with niter through an "eye" in a cover of bone ash. When tough, it is ladled into iron molds. About 6,000 ounces constitute such a bar melt. The bars are worth about $8,000 each.



REDUCING HOUSES—SULPHURIC ACID PROCESS. ASSAY OFFICE, NEW YORK.





DRYING BINS AND CRYSTALIZING VATS. BLUESTONE MAKING. ASSAY OFFICE, NEW YORK.

FINE BARS.

The bullion thus purified is now ready for issue to the public for industrial use, or to enter on its second stage toward coinage.

The consumption of gold and silver in the industrial arts is much greater than is generally supposed.

During the year ending June 30, 1895, gold and silver bars for industrial use were manufactured in the Philadelphia mint and the assay office at New York to the coinage value of $17,818,581, in about equal proportions as to value. Private refineries furnished not less than $5,000,000 more. This first cost for what to the gold beater, jeweler, watch-case maker, etc., is simply his raw material represents an enormous industry when we consider the amount of high-grade labor which is bestowed on gold and silver wares. These bars are 0.999 fine and are furnished to the public by what may be called a system of exchange.

A depositor may bring crude bullion in any quantity ($100 or more in value) and receive either fine gold bars or coin, at his option, to the full value of the gold in his deposit, less a trifling charge for melting, assaying, parting, etc. These charges vary according to the nature of the deposit, but may amount to 5 cents per ounce. The bars or coin are delivered from stock on hand as soon as the value of the deposit is ascertained by assay, usually the following day. For the silver contained in gold deposit the owner may either receive pure silver bars or be paid in silver dollars or currency, at the market value of silver.

INGOTS FOR COINAGE.

Having a stock of refined gold and silver nearly pure, the first step toward conversion into coin is to make an alloy with copper, in such proportions as will produce standard planchets or "blanks" in the hands of the coiner. While the standard fineness of gold and silver coin is the same, yet, as will appear later, the quantity of copper to be used in the two cases differs a little, yet materially.

Weighed quantities of gold and copper, or of silver and copper, are melted together in a large black-lead crucible, the molten metals thoroughly mixed and then poured into cast-iron molds to produce what are known as ingots. These are rectangular bars, differing in size according to the kind of coin for which they are intended. The ingot for silver-dollar coinage is 1⅛ inches wide by one-half inch thick and 12½ inches long. Some 70 such ingot bars are made from one "melt," and weigh collectively about 3,300 ounces (220 pounds).

All the ingots are stamped with the melt number, of which a record is kept by the melter and refiner, by the assayer, and by the superintendent.

The crucible is set for the day's work in a furnace peculiarly adapted to the purpose, and a continuous fire maintained, using the best stone coal and a natural draft. Five or six melts are made in each furnace during the eight hours; and if the crucibles were taken out of the furnace at each time of pouring much time would be lost in resetting and surrounding it with a fresh fire.

The metal, when melted, is thoroughly mixed by stirring with a tool not unlike a churn dasher,[1] and it is then ladled out into the molds with what is called a "dipping cup."[1] This is a small black-lead pot made with a lip on one side and a straight edge on the opposite side, so formed as not to be crushed when firmly gripped by a pair of nipping tongs.

The molten metal is slowly poured from the dipping cup into upright molds, of which some twenty are placed in a shallow iron pan convenient to the furnace. As soon as a mold is filled it is removed by an attendant helper, and passed by him to another, who opens it on an iron-covered table and throws out the red-hot ingots. These are chilled in water and then immersed for a few minutes in very dilute sulphuric acid. This latter removes a slight coating of copper oxide and gives the

[1] Shown in picture of furnace.

ingot a bright matte color. The "gate" end of the ingot is then cut off in a "topping machine," which has a shear knife driven by steam power. The little fringe left on the ingot by the parting line of the mold is removed by a file and then each ingot receives the number indicating the melt from which it was made.

The mold, when ready for use, consists of three pieces, clamped together by a band and set screw. The outer pieces are recessed to the form of an ingot, while the central piece acts as a mere partition between them. Thus each mold becomes double and furnishes two ingots at a filling, while only consisting of three main parts.

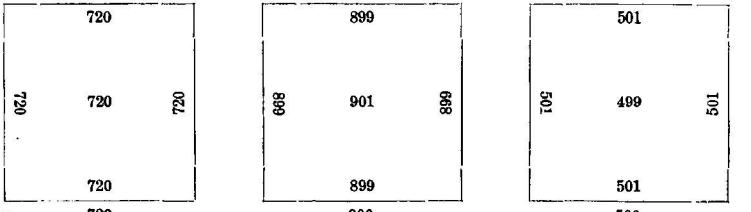
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Standard coin is composed of 900 parts of gold (or silver) and 100 parts of purest copper in each 1,000. While the law allows a slight margin in the fineness of our coins, to provide for the limitations of all human workmanship, yet this margin is sharply defined, and is but a fraction of 1 per cent. Small as this margin is, no mint work would be considered good which did not produce coin very far within its limits. Our gold coin rarely varies from standard fineness by more than three one-hundredths of 1 per cent. Silver coin, which is much more difficult to make uniform, as will be explained, may vary by as much as one-tenth of 1 per cent in individual pieces, though the average is almost exactly correct.

It may seem to be a rather simple problem to first calculate the quantity of copper required to be added to bullion of known fineness and then to so apportion the metals on an accurate balance as to get an almost mathematical result after blending them by fusion.

If this were so, the formula for the production of gold and silver ingots would be identical.

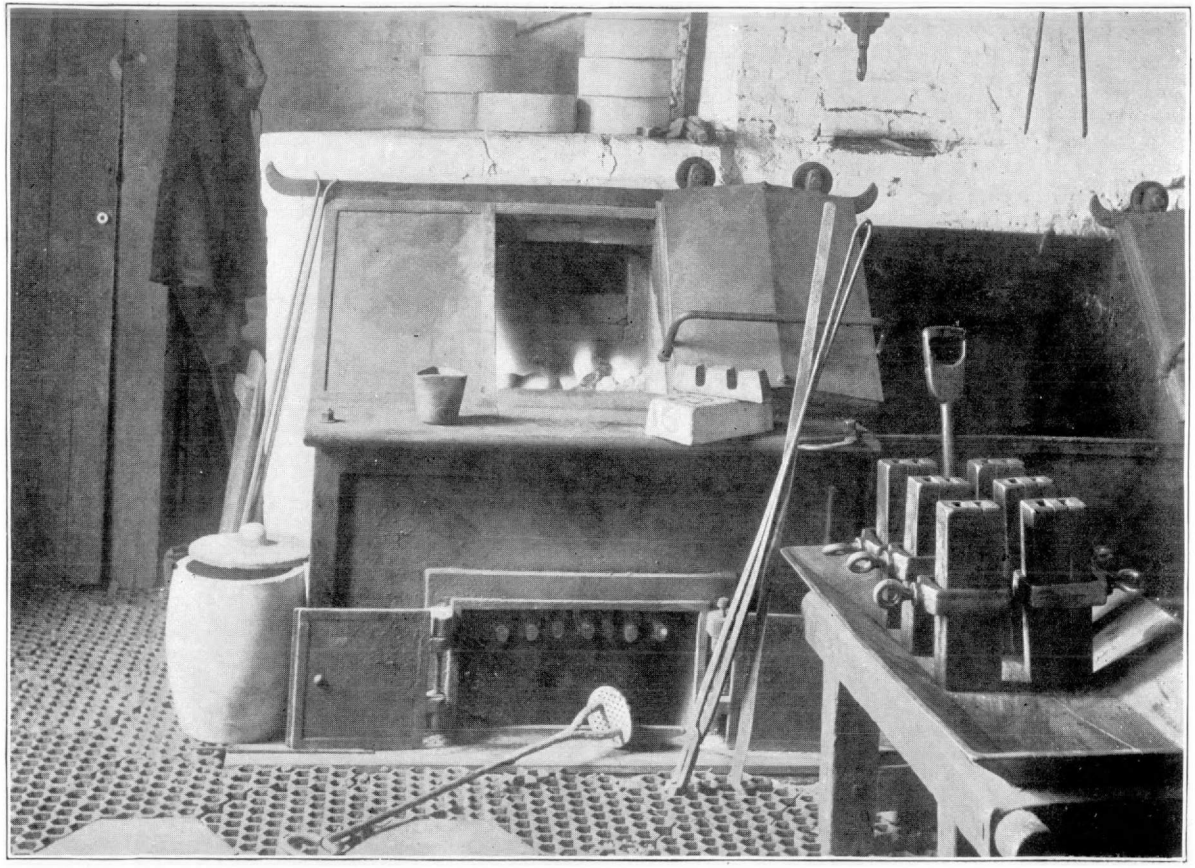
In fact, the practice is very different in alloying the two metals for the production of standard coin. If gold and copper are melted together in any proportion and thoroughly mixed while fluid, the resulting bar or ingot will be uniform throughout in composition. But when silver is alloyed with copper only one proportion is known which will give a uniform casting. This proportion is 72 per cent silver to 28 of copper, and differs widely enough from our standard alloy to complicate matters in a marked degree. With more silver than 72 per cent the center of a cast bar will be richer than the outside, which chills first, while with a less percentage than 72 per cent the center of the bar will be poorer and the outside richer than the average. This characteristic of silver-copper alloys is known to metallurgists as "segregation."



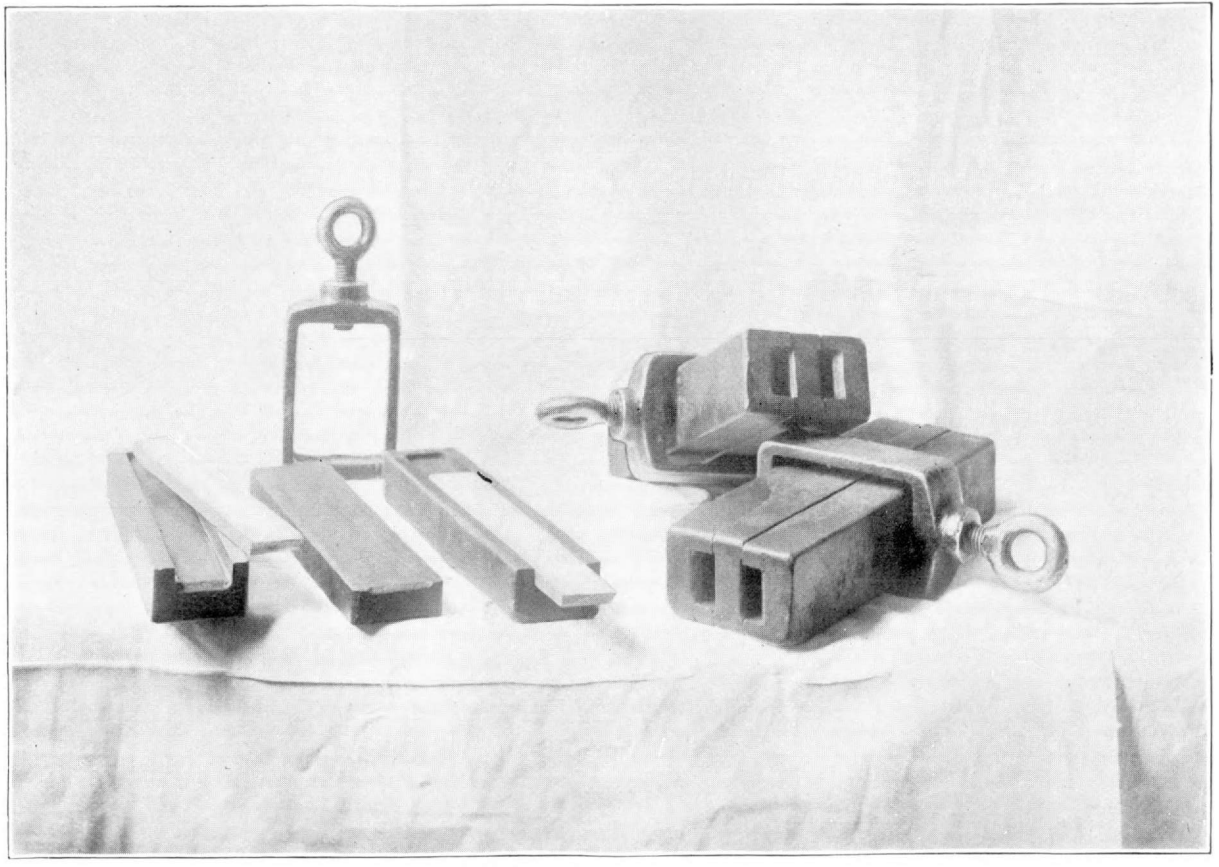
Silver,	720,	900,	500.
Copper,	280,	100,	500.

Section through silver-copper bars showing, effect of "segregation."

It would seem that any alloy of silver and copper containing either more or less silver than 72 per cent has a lower melting point or remains fluid longer than the 72 per cent alloy. Hence the last portion of metal to chill in the center of a bar will in the one case be richer and in the other poorer than the average fineness of the molten metal poured into the mold when cold. A cutting from the outside of such a bar is therefore never taken for an assay. Only when the bar approaches fine silver can "a cutting" be relied on by the assayer. When ingots are made for standard silver coin, samples are taken from each melt by the assayer, whose certificate is



FRONT VIEW OF MELTING FURNACE, SHOWING CRUCIBLE, DIPPING CUP, STIRRER, TONGS, INGOT MOLDS, METAL BARS, ETC.



INGOT MOLDS—OPEN AND CLOSED.

necessary before the ingots can pass to the coiner. Since a cutting from single ingots or even a sample bar cast from the melt would be misleading, what is called a "granulation" is taken. When a "melt" is ready for pouring into the molds, a little of the molten metal is dropped into water, giving "grains" or large shot, which may be rolled out and used entire, or nearly so, for assay. Two such granulations are, in fact, taken, one at the commencement of the "pouring" and a second when the crucible is nearly empty. These granulations are each assayed, and must not only show the melt to be of proper fineness but must agree with each other within some hundredths of 1 per cent before the ingots made from the melt are adjudged to be of proper fineness to pass to the coiner.

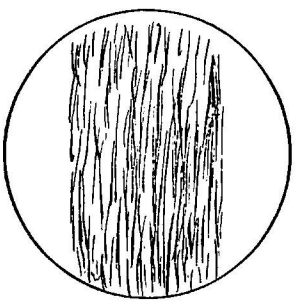
From what has been said about segregation, it will be readily understood that a silver ingot is not uniform in composition. In a cross section the center of such an ingot is appreciably richer in silver than the outside surface, which first chilled in contact with the iron mold. The ingot, being a flat bar, is rolled out by the coiner into long strips the thickness of the future coin. The rich center of the bar has now become the rich central line of a long thin strip, and disks or planchets punched from such a strip will necessarily be richer in silver than the scrap.



Section of dollar ingot.



Section of strip.



Plan view of dollar planchet; shaded lines showing richer portions in each case.

It will now be easily seen that if the melter and refiner furnished to the coiner silver ingots of 0.900 average fineness, the planchets cut therefrom would make coin above standard.

It has been found by long experience that the silver ingot which will produce standard coin should not assay above 0.899 in silver.

All calculations for amount of copper required in making up silver melts have 0.899 as the final result desired. The problem is still further complicated by the fact that about one-half of the weight of ingots sent to the coiner comes back as clippings and of lower fineness than the average. These clippings are added to each melt of fresh bars when available, and their lower fineness must be allowed for in calculating the alloy required for the bars.

When two rows of planchets are cut from strips, as is the case in quarter-dollar and dime coinage, the central line is left intact, and the clips are therefore richer than dollar and half-dollar clips, from which but one row of planchets have been cut. It thus appears that not only the quantity but the kind of clippings added to the bar melt modify the quantity of alloy to be added.

No two silver bars have the same weight, and they usually differ a few thousandths in fineness, so that the alloy must be calculated for each individual melt. With ten furnaces in operation on ingots, making five or six melts each per day, it will be seen that the calculations required involve much labor, and an interesting chapter might be written on the short-cut methods of wonderful accuracy which the ingenious computor is driven to invent by the constant iteration of similar yet never identical calculations.

Such are some of the perplexities arising from "segregation" in silver-copper alloys.

The manufacture of gold ingots is much less troublesome to the computer. The same crucible which has a holding capacity of, say, 3,300 ounces of standard silver will serve for a gold melt of 6,000 to 6,500 ounces (400 to 430 pounds avoirdupois).

The fineness of gold bars is furnished to the melter and refiner by the assayer to the tenth of one-thousandth.

Bars, preferably of identical fineness, are weighed off in proper quantity for a melt, and placed on a hand truck with a melt number tagged to each little pile of bars. A sufficient number of such are prepared for a day's melting. A chest of drawers mounted on a truck carries suitable-sized boxes, each having a permanent number plainly marked on it.

The copper requisite for melt Nos. 1, 2, 3, etc., is placed in boxes 1, 2, 3, etc., and the trucks with bars and the one carrying the boxes of alloy meet in the melting room where the distribution is made, a single melt at a time—bars and alloy—to each furnace.

A strict record is kept and the melting room is charged with weight of all metals sent into it in the morning. At the close of work for the day and before the workmen are dismissed, all returns from the room, whether ingots, tops, filings, etc., are weighed, when any shortage, real or apparent, will be noted. Of course the returns never exactly equal the charge sent out, since some little metal will adhere to the crucibles and some will be found in the ashes. This is afterwards recovered as "sweeps." But for the time being these shortages are unknown quantities. Experience, however, has shown what may be expected to pass into the sweeps, and an allowance is made in comparing the charge and returns from the day's work.

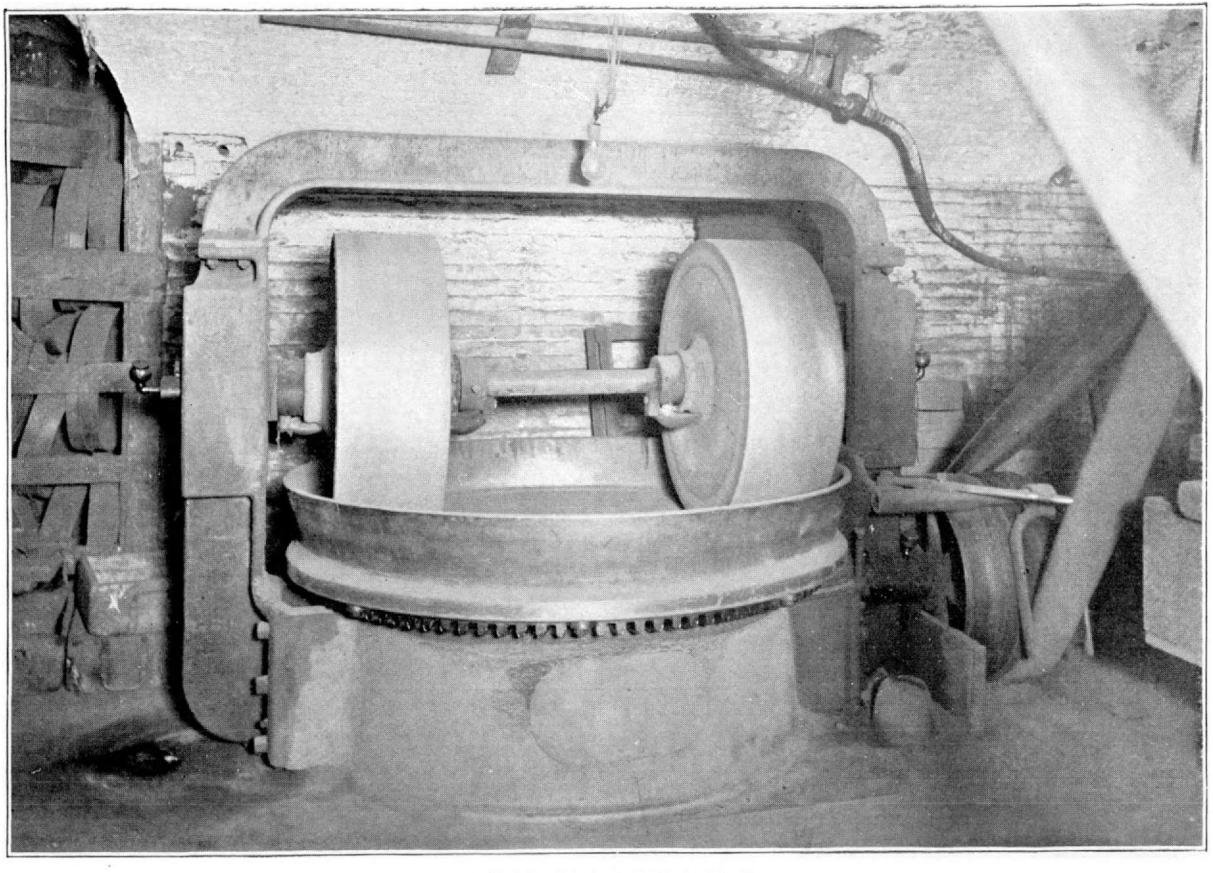
"SWEEPS."

This is a very broad general term in mint practice, and includes every kind of waste material known to contain, or likely to contain, gold or silver, except actual sweepings. The floor of the melting room is swept each day, but the gatherings from the broom are carefully mingled with a suitable flux and thrown into one of the crucibles, still hot and surrounded by the fire left from the day's work. A crucible is selected which has seen such service as to entitle it to retirement from age. On the following morning the contents of the crucible will be found to have "sweated" down, the flux to have fused into a glass, and a lump of metal or "king" will be found at the bottom on breaking the crucible. This king is weighed, credited to the melting room, sent to and charged to the refinery.

The actual "sweeps" consist of broken crucibles and dipping cups, all ashes from the fires, burnt gloves, aprons, saw dust, and packages in which bullion has been sent to the mint, settlings in catch wells and in roof gutters; in short, everything which may contain bullion without its being visible to the eye.

All material of this kind is sent to the sweep cellar, and such as needs crushing is passed under heavy cast-iron rollers mounted in a mill similar in principle to the Chilian. The advantage of the roller crushing is that while brittle materials are reduced to a coarse powder, any pellets of metal will be flattened out and caught in the sifting operation which follows.

These metallic scales are melted down and find their way to the refinery. What



GRINDING MILL IN SWEEP CELLAR.

passes through the sieves still has value, and, if the product of silver working, it is sampled, assayed, barreled, and sold to smelting works.

If the powdered material is from furnaces in which gold has been worked, it is passed through an amalgamator into settling tanks. The mud from these is dried, sampled, assayed, and sold.

The melter and refiner receives a credit in his bullion account for the amount of gold and silver shown by assay to be contained in the sweeps sold. Sales are made on competitive bids, and the returns from this source at the Philadelphia mint are from $18,000 to $20,000 per annum for sweeps produced in the melting department alone.

ASSAYING OF GOLD AND SILVER.

By JACOB B. ECKFELDT, *assayer of the United States mint at Philadelphia, Pa.*

ASSAY OF GOLD.

Gold received at the mint for refining or coinage, either in a manufactured or native condition, is of every variety of fineness, the alloy in a majority of cases being silver, with a smaller proportion of base metal.

In some cases of low-grade gold the alloy is largely composed of copper. The object of the assay is to ascertain these different proportions, both in order to base the calculations for value and for subsequent minting operations. For this purpose a small sample is cut from each bar after melting. The fineness of this sample must, if the melting has been properly conducted, be the fineness of the gross amount.

The fineness of gold being expressed in thousandths (pure gold being 1,000), it has been found expedient in assaying to employ the French system of weights, using the demigramme as a unit of 1,000 parts with the decimal divisions to the ten-thousandth of that weight.

The demigramme is rather less than 8 grains. From the sample, after it has been laminated for convenience in chipping, there is accurately weighed 1 demigramme on the assay balance.

This assay balance is so constructed as to be of the utmost precision and delicacy, and so fine is the adjustment that it is sensitive to the fiftieth of a milligramme.

To the gold, after being accurately weighed, there is added sufficient fine silver to make about twice (according to one system) or thrice (according to another method, now less used) the estimated amount of silver which may be contained in the alloy, extreme care being necessary that the amount of silver added varies as little as possible from this proportion, as in any marked divergence the result would be liable to inaccuracy. Practice enables an expert to judge of the fineness of the gold within a few thousandths, thus securing the proper basis for the addition of silver. It is needless to say that the added silver is accurately weighed.

If the gold for assay is of low fineness, or contains a large amount of base metal, where it is impossible to estimate the quality, it is customary to make a preliminary or approximate assay as a basis or guide for a subsequent rigid assay.

The gold and silver, each having been weighed, are inclosed in a piece of lead foil about ten times the weight of the assay. A very little copper is added, merely to assist the cupellation. These are now ready for what may be termed the first part of the operation, that of removing the copper and other base metal. This is effected by the cupelling process.

The cupel is a small, shallow cup made from the ash of bones or the pith of animal horns. It possesses the quality of absorbing the oxides of the metals, but not the metals themselves.

The bone or pith is first well burned in open air and thoroughly ground, after which it is moistened with water and pressed in a mold to the desired shape.

The assay furnace is oval in cross section, about 1 foot in height, made of fire brick. Extending across the furnace about the center is what is known as the "bridge"

(this is also made of fire brick), and is designed to support the muffle. The muffle is the oven for the reception of the cupels. It is ⌓-shaped in cross section, flat-bottomed, with an arched top, its length nearly corresponding to the depth of the furnace. The modern furnace is arranged for burning gas; the flame completely surrounding the muffle subjects it to a high heat, easily controlled and regulated.

The front of the furnace has an arched opening corresponding to the muffle; through this opening the cupels are introduced by a long pair of spring tongs. When in operation, the muffle is nearly closed by a door, allowing, however, the entrance of a regulated current of air, which, passing over the assay, oxidizes the lead and base metals, their oxides being absorbed by the cupel.

At the back of the muffle is a slit or opening, which allows the exit of the unabsorbed fumes formed by the oxides of the metals, which are not absorbed by the cupel.

The furnace having been properly heated, the cupels are placed therein and brought to a uniform temperature of which the assayer must judge from experience. Each leaden bullet with its contents is then placed in its cupel, and the furnace closed. The lead in which the gold and silver has been inclosed is rapidly changed to a fluid vitreous oxide, which, exerting an oxidizing effect upon the base metals in the gold, causes their absorption into the pores of the cupel.

The lead likewise helps to form a more uniform alloy of the gold and silver.

The precious metal is allowed to remain in the cupel until all agitation ceases; it then presents a bright surface, which indicates that the base metals have been oxidized and absorbed.

The cupel is now allowed to cool gradually, and the button of pure gold and silver detached. The next step in the operation is the extraction of the silver, which is effected by digesting the rolled-out button in nitric acid.

The object of the addition of fine silver previous to the cupellation is to make an alloy, in which the particles of gold will be so far separated from each other that they may not protect any part of the silver from free action of the acid. A total extraction of the silver, both that which has been added and that which was originally in the alloy, is thus insured, within the limit hereafter described.

The button is hammered, annealed, and rolled to a thin strip, to furnish a larger surface for the action of the acid. This strip is loosely coiled into a small roll, technically termed a cornet.

The cornet is now ready for the process of separating the silver. If three parts of silver have been added in making up the assay, the action of the acid has to be conducted more slowly (to lessen the danger of breaking the cornet) than when but two parts of silver have been used; consequently, a weaker acid is employed.

The cornet is introduced into a small vessel or flask, containing 1¼ fluid ounces of nitric acid at 22° of Baumé's hydrometer; heat is then applied, either by a sand bath or gas jet, and the acid boiled for ten minutes.

The resulting solution, which contains nitrate of silver, is poured off, and three-fourths of an ounce of stronger acid, at 32° Baumé, is substituted. This is also boiled for ten minutes, after which the operation is again repeated with acid at 32°.

When the boiling or digestion is completed, it is presumed that the whole of the silver has been removed. The acid is accordingly poured off, and the cornet well washed with pure water. It is then deposited in a small clay crucible, which is placed in the muffle, that the gold may be dried and annealed.

The cornet (which is now fine gold) is brought to the assay balance and its weight ascertained in thousandths of a demigram. The number of thousandths which it weighs expresses the fineness of the original sample in thousandths.

If but two parts of silver have been used in preparing the assay, the cornet is introduced into the flask containing 1 ounce of nitric acid at 32° Baumé's hydrometer. This acid is boiled for ten minutes, when it is poured off and replaced by another equal charge of acid of the same strength, in which the gold is again boiled

the same length of time. After the second boiling has been completed, the cornet is washed, dried, annealed, and weighed, as in the preceding case.

By subjecting another demigram of the alloy to the cupellation process, without adding any silver, the base metal alone is removed. The loss gives the proportion of base metal, and, the fineness in gold being known, the amount of silver is ascertained by difference. It must equal 1,000, less the sum of gold and base metal.

It is customary with every assay or set of assays to make one or more of pure gold, as a test assay or proof of the work, to detect any possible inaccuracy from overheating, too prolonged boiling, and particularly to afford the necessary correction for "surcharge," which will be explained at the close.

With every set of assays for the determination of base metal there is also a proof assay made. For this purpose gold of a standard fineness is used when the assays are of native gold, or in other cases when the proportion of alloy is not very large. A special proof, however, is made for every such assay. The proof, by calculation from the approximate assay, is so composed that when melted it will make an alloy similar to the sample for assay. Its exact proportion of base metal being thus known, any deviation from this proportion shown by cupellation becomes apparent. By this deviation the necessary correction is made upon the result of the regular assay. In an assay of gold containing platinum, as in dentist plate, the amount of silver in the alloy can not be accurately determined by the cupellation process, for the reason that the platinum, being a nonoxidizable metal, it is not absorbed by the cupel, but is returned in the button as precious metal.

The proportion of silver in such an alloy is ascertained by the humid assay (elsewhere described). For this purpose a definite proportion of the alloy is weighed, inclosed in lead with sufficient fine silver, for the proper working by the humid assay. The bullet is then placed in a cupel, and retained in the furnace until the whole is melted, when it is immediately taken out, without allowing any absorption by the cupel. When solidified, the alloy thus formed is placed in a bottle, and dissolved in nitric acid, after which it is proceeded with as described in the article on the humid assay of silver.

Another method of making this assay for silver, is to weigh a definite proportion of the alloy, and carefully fuse it under cyanide of potassium, with an excess of pure cadmium or zinc. As soon as fused, the alloy is poured, the resulting button, freed from cyanide, is dissolved in nitric acid, together with the proper quantity of fine silver for the humid assay working. After complete solution the assay is proceeded with as further described.

The object of the cadmium is to form an easily partible alloy, that is, one in which the gold is thoroughly broken up by the acid and any alloyed silver completely dissolved.

Within a few years an improvement has been adopted in the apparatus for assaying as conducted in the United States Mint. The cornets are prepared as previously described, but in place of boiling them in flasks they are deposited in separate cups of platinum, arranged in a basket-like apparatus of the same material, capable of holding sixteen assays in a small space.

This is placed in a basin or cup of platinum containing nitric acid of the required strength, acid at 22°, if three parts of silver have been used, and at 32°, if but two parts. Heat is applied and the acid boiled for ten minutes; the basket containing the cornets is then withdrawn and placed in another similar vessel, and acid at 32° is poured over them and boiled as before. This change is generally made the third time to insure a complete extraction of the silver. To prevent the escape of the fumes from the decomposition of the acid, a dome-shaped covering is placed over the vessel which connects by a tube with a condenser, or a flue.

The boiling operation or digestion having been completed, the cornets are washed, dried, and annealed without removing them from their respective separate compartments in the basket. The great advantage in this operation is the uniformity with

which the cornets are treated, all being subjected at once to the same action from the acid. It also saves time and trouble in repeated decantings. It is somewhat liable to the danger of spoiling the whole set by the breaking up or by transposition of some of the assays, but with due care this will rarely happen.

The foregoing operation does not entirely remove the silver, although it was formerly supposed that it did, and thus the gold coins of the best mints showed a deficiency from the true or legal fineness even when it was not intended. This small quantity of silver which persistently clings to the gold is called the "surcharge."

The surcharge of silver is very minute and varies, say, from two to seven or eight tenths of a thousandth. It is ascertained in each assay or set of assays by the "proof" already mentioned, which shows the amount of silver retained by a known weight of gold under identical treatment with that given the sample under assay. The weight of the cornet from the proof strip will be greater than that of the gold in it by the amount of the "surcharge." The surcharge thus found is therefore to be deducted from the weight of such cornets as accompanied the proof through all the processes of treatment.

In assaying fine (or nearly fine) gold, we weigh the proof to 1,000 parts of our test gold; but in assaying ingots for coinage and the ordinary class of deposits a proof of 900 parts is used, and in lower grades of gold a synthetic proof is used corresponding to the approximate or supposed fineness of the metal, the object being to subject an alloy of known composition closely similar to that under test to identical treatment.

After the ingots have been made, the first and last ingot from every melt are carried to the assay room and a sample slip taken from each. These are assayed separately and their fineness reported to the melter and refiner. The ingots or melts which may be too far from the legal standard, or fail to show a uniformity of fineness in the assays, are condemned. They are then remelted with the proper addition of either gold or copper, as the case may require, to bring them to standard.

With every sample of gold assayed there is also a corresponding duplicate assay made, to guard against any error which might possibly occur in the various assay processes. Besides this, the duplicate serves to show if the alloy be of a uniform fineness throughout. If such is not the case (as shown by the variation of the assays), the mass from which the sample was taken is remelted and stirred to make it homogeneous, after which it is assayed in duplicate as before.

In case the gold for assay be of low fineness, or if there is but a small proportion of gold in the alloy, it is found to be expedient in preparing the assay to add sufficient fine gold so that the assay may contain 900 parts of gold in the 1,000. By this course the exact fineness of the alloy is ascertained, otherwise an allowance would have to be made for a slight absorption of gold by the cupel, which will happen when a large proportion of alloy is present. When the weight of the cornet is ascertained, the amount of fine gold which was added must be deducted, the difference being the fineness of the original alloy.

It sometimes happens that the ordinary amount of lead is insufficient to cause the entire elimination of all the base alloy in the gold. It may be, too, that the cupel is not capable of absorbing the entire amount of lead which such an assay would require. To avoid these difficulties it is customary to weigh the assay at one-half the usual weight, adding fine gold as described above, thus diminishing in like proportion the amount of base metal to be oxidized and absorbed by the cupel.

Assay of Silver.

The object of the silver assay is to determine the exact proportion of silver contained in any bullion, plate, or coin. The assay does not regard the nature or variety of the alloying metals, but simply their proportionate weight to that of the pure silver. Incidentally, however, for the benefit of the melter and refiner (in the mint assays), or for his own information and experience, the assayer takes cognizance, in passing, of the nature of his solutions and precipitates; also of the ductility of the metal to be tested.

When the silver alloy is melted a sample is taken out for the assayer. This is done by dipping a small portion from the pot and pouring it into cold water. The resulting granulations are carried in copper cups to the assayer's laboratory. The reason for this method of sampling silver is elsewhere explained.

After drying the granulations by heat, about twenty-hundredths of an ounce are reserved in the assay room and the remainder returned. The sample lots are now laid out upon a board containing cup-like sockets bored at regular intervals and numbered. A granulation from each sample is next hammered and rolled into a thin strip, this being merely for convenience in cutting for the adjustment in weighing the assay. Each strip is laid beside its kindred granulations and numbered by stamping. The board is now removed to the assayer's "weighroom."

There are two methods of assaying silver—one known as the "dry" or "furnace" assay or "cupellation;" the other, the "wet" or "humid" assay or the "volumetric process."

The method of "furnace assay" or cupellation, already described for gold, when applied to silver requires such a nice regulation of temperature and so many extreme precautions, and is at best so liable to uncertainty of results, that it is now only used in a subsidiary way, to furnish an approximate result, or a basis for the closer and more delicate manipulations of the humid assay.

The humid assay, with proper care and due attention to the condition of the liquids, may be regarded as a perfect process of analysis for silver, both as respects accuracy and uniformity of results. The principle of the humid assay is that of determining the proportion of fine silver in an alloy by ascertaining the exact amount of a precipitant of known value required to eliminate the silver contained in a solution of a given weight of the alloy, so that the result is obtained without a final weighing of the precipitated silver. The necessary amount of the precipitating agent being found and the weight of the alloy known, the number of parts of silver in a thousand is deduced by calculation. For this purpose a solution of common salt, chloride of sodium, is used.

STANDARD SOLUTIONS.

Two solutions of different proportions are made; the first is known as the "normal solution," the second as the "decimal solution." The former begins, the latter finishes the operation.

The normal solution is prepared by taking the saturated solution of salt in water and adding water to it in the proportions, by weight, of 97.93 parts water, 2.07 parts saturated solution, together making 100.

By supposing an example, the successive steps of the assay process can be more readily followed and understood.

If the silver be of an unknown fineness, an "approximate" assay must first be made by cupellation or by a preliminary humid assay. If, however, as in the case of ingots, foreign coins, standard plate, or silver nearly fine, the fineness be supposable or approximately known, no previous assay is requisite.

Let us now suppose that the silver to be assayed be not far from .900 fine. The working weight will be thus determined: Divide 1,000 by 900, and the result is 1.111; that is, we have a weight which will contain 1,000 parts and will be precipitated by the fixed dose of normal solution.

For convenience in calculating, however, the table of weights increases and diminishes by fives; and as there is always more or less uncertainty about the supposed fineness, and also concerning the strength of the normal solution (owing to changes of temperature and evaporation of its water), and for another reason the next higher weight rather than the next lower weight is used, i. e., 1.115 in preference to 1.110. The object of this will appear more obvious hereafter.

We are now ready to weigh the silver. The balance in use is sensible to the tenth of a thousandth of a gram, to which point the result may be carried if necessary, although it is not customary to report so closely.

With a pair of delicate forceps the assayer places upon the scales the weight 1.115 (i. e., one gram and one hundred and fifteen thousandths) of a gram, as previously determined. Upon the other side of the scale the granulations are added until the requisite amount is nearly obtained; the final adjustment is made by cuttings from the rolled slip.

The adjustment completed, the silver is poured from the pan through a funnel into a glass bottle of particular shape and size, then dissolved in, say, 10 grams nitric acid (26° Baumé) by gentle heat.

It is during this process of solution that one of the especial advantages of the humid assay is reaped—in the detection of various foreign elements in the alloy, as gold, tin, copper, antimony, the sulphide of silver, etc., some of which dissolve with difficulty, others not at all, and all showing characteristic differences.

Precipitation by the normal solution is the next step in the operation.

The solution is contained in a large glass vase moderately elevated above the table. An india-rubber tube drops from a stopcock at the bottom of the vase and lies loosely along the table except about midway of its length, where it is intercepted by a smaller spigot; this is screwed down at a convenient working point for the right hand, the tube being free at the left.

The end of the tube is now slipped over the nozzle of a stationary, perpendicular pipette; with the right hand the table spigot is turned on, and the normal solution flows upward into the pipette, the top of which is drawn into a fine opening. Any overflow simply falls into a saucer surrounding the pipette. When full the flow is cut off, the finger placed upon the upper vent, and the tube withdrawn from the lower nozzle; we have thus an exact measurement of 100 cubic centimeters.

The assay bottle containing the solution of nitrate of silver is next placed under the pipette, the finger is removed at the top, and the solution falls into the bottle.

The immediate result of the operation is the formation of chloride of silver (also nitrate of soda), which is a white, flocculent substance, rendering the liquid in the bottle opaque. Other compounds, as the nitrates of copper and lead, etc., may remain in the solution, none of which seriously interferes with the assay, and some not at all.

It being necessary that the white precipitate should not thus pervade the liquid, the bottle is placed in a machine known as the "agitator," which gives it a violent agitation. This can, of course, be done by hand, but since several assays are made at once, the aid of steam saves both labor and time. The agitation is continued four or five minutes, whereby the precipitates curdle and quickly subside.

The bottle is next carried to the blackboard table—an upright slab of slate of the full length—and at the back of the table is marked off into ten divisions and numbered. If there be more than one assay in process, each bottle is placed opposite its respective number.

The agitation having caused the chloride to settle as a dense white precipitate at the bottom of the bottle, the liquor (nitrate of soda) remains transparent, though sometimes colored by the alloying metals.

It is to be understood that the charge of normal solution from the pipette is calculated to precipitate exactly 1 gram of pure silver; but as there has been probably either more or less than the exact 1,000 parts of fine silver in the original weight of 1.115, we have yet to ascertain whether the normal solution has performed the whole work of precipitation, or (in event of the alloy being baser than we had supposed) whether the precipitation has been overdone, i. e., whether an excess of salt remains in the bottle.

Accordingly the bottle is charged by a small hand pipette with a measure of the "decimal solution" of salt (previously described). This solution is only one-tenth as strong as the normal solution, and the single dose is, in bulk, the one-hundredth part of the large pipette, so that one dose of decimal solution precipitates only the one-thousandth part of a gram, i. e., 1 milligram. If the normal solution was not sufficient to precipitate all the silver, there will, upon allowing the decimal dose to run gently down the inside of the bottle, be a white cloud formed upon the surface

of the liquid, the density of this cloud varying with the amount of silver still in solution.

The assayer now holds the bottle to the eye level and judges by the appearance of this cloud, as nearly as possible, how many more decimal doses will be required to precipitate all the silver remaining in solution.

Suppose the assayer now decides that three additional doses will finish the work of precipitation. He accordingly so charges the bottle, noting the charge upon the slate. The bottle is agitated again, and when the liquid is cleared it is tried as before with a decimal dose of salt water. If the judgment and application of doses have been correct, only a delicate trace will appear on the surface. This proves the assay complete.

It may be that the operation of dosing and agitating will have to be repeated several times, the assayer each time adding to the record upon the slate; but the process is always the same until the final trace is reached.

As the density of the normal solution may vary from day to day, or during the day, with the temperature, and from other causes, assays of pure silver are made as a daily test of the state of the solution—in other words, an assay is made of the normal solution by silver of known fineness.

This assay is known as the "proof," and by it all other assays are adjusted, when the normal solution is proved by it to be at variance. Suppose, for example, our "proof silver" to have been weighed at 1.004. If the normal solution were exactly correct it would precipitate the 1,000 and leave the 4 to be precipitated by decimal doses. But supposing the proof assay is found to require only three and one-half additional doses; this shows the normal solution too strong by half a thousandth—in other words, every assay should have recorded for it a half-decimal dose more. This correction is accordingly made for each assay.

In our example, three doses were required to finish the precipitation, but our proof has shown that another half should be added in the record since the normal solution was by so much too strong. The result upon the slate will then be three and one-half instead of three.

The fineness of the silver is then obtained by the following proportion:

Weight.		Normal solution.	Decimal solution.		Fine silver.		Required fineness.
1.115	:	1.000	+3½	: :	1,000	:	.900

showing the silver to have been .900 fine. For the sake of expedition, however, tables are in use for the determination of both weight and fineness.

It may be that the original weight of the alloy was not sufficient to contain 1,000 parts of pure silver, and, consequently, when the decimal charge is added no trace of chloride appears, or the same result would ensue from the assayer having overdosed the bottle with the decimal solution during the "working." In such cases a decimal solution of nitrate of silver is used.

This is the "descending," while the working by salt is the "ascending" assay. As the latter forms a clearer liquor after shaking, and for other reasons, too, the ascending mode is more satisfactory. It is now apparent why the next greater (1.115) instead of the next smaller weight (1.110) is selected, thus allowing the assayer what is called "working room." It is necessary that the assayer in the above operation be correct in his eye judgment of the decimal dose required, since the slightest overdose precludes the appearance of the trace after the next agitation, and requires him to work back with the opposite solution.

It is the custom at the mint to work to the one-fourth of a thousandth in silver, though in the higher grades of fineness the results can be carried to the tenth, if necessary.

It sometimes happens that silver contains alloys which render the liquor in the bottle so obscure that the judgment of the cloud density is impeded and the final trace hardly discernible. This annoyance may be removed by the tedious and unsatisfactory operation of filtering after each agitation. But a quicker and better

method is sometimes resorted to here, which consists in using 250 milligrams (one-fourth of a gram) of the alloy and adding fine silver to make up the full gram for precipitation. The result is obtained by subtraction of the fine silver and multiplication for the full gram. Sometimes 500 parts and sometimes 1,000 parts of alloy are used.

When silver contains sufficient gold to pay for its extraction a regular gold assay is made, by the process described in the paper upon that branch of the business. If the gold be in large proportion the alloy must be rolled very thin (for the humid assay) and boiled in a stronger acid, or the metal may be fused with cadmium (and treated as described in the article on gold assaying) before proceeding with the humid assay. Duplicate assays are always made, to guard against error in the assay process, and also to detect any want of homogeneity in the mass of silver.

In the assay of ingots, five melts with their duplicates, constitute a full "set." To prevent confusion and error, the bottles are all numbered, in sets, from 1 to 10, and are carried from place to place in a port-flagon made to hold ten. The assayer reports to the melter and refiner the fineness of each melt, condemning those which vary too far from the legal standard.

MANUFACTURE OF DIES.

By CHARLES E. BARBER,
Engraver of the United States Mint.

Coinage and medal dies are prepared in the following manner:

When a coin or a medal is required, the first thing to be obtained is the design; that having been agreed upon, the work of producing the die follows, by one of two methods. The first and oldest is the following:

The design being determined, a drawing is made the exact size of the coin or medal required. From this drawing a tracing is taken for the purpose of transferring the design to the piece of steel that is to be the die.

To transfer the design to the steel, proceed as follows:

Smooth the surface of the steel with a dead smooth file, then go over the face of the die with fine-cutting oilstone or very fine emery, used as a lap. Having obtained a perfect surface on the face of the die, cover the same with a thin coating of transfer wax; then take the tracing which you have made with lead pencil and place that in position, face down, upon the transfer wax, and carefully rub with some smooth instrument, such as a burnisher. When you have rubbed this tracing sufficiently, remove the tracing, and you will find the design transferred to the steel.

This transfer is, of course, very delicate, and easily obliterated; therefore to preserve it, it is best and necessary to go over the lines with a sharp-pointed instrument, graver, or other sharp tool.

The next process is to remove the steel where the form or relief is required, forming an intaglio in the die so that relief may be had on the coin or medal. This is done with chisels and gravers. As the work progresses the engraver wishes to see the effect of his cutting, and from time to time takes impressions from his die in soft wax or clay. This is done by having a wood block, on the end of which is placed some soft wax or clay, and by the use of a hammer he drives the soft material into the die, which gives an impression in relief, the same as the coin or medal is intended to be, and in this way he proceeds until he has accomplished the desired result. To prevent the wax from adhering to the surface of the die, a little plumbago is mixed with the wax or a small quantity is dusted on the surface before taking the impression.

In some cases the die is not brought to a finished state, as some part can perhaps be better done in relief. In that case, when all that can be accomplished to advantage in the die is completed, it is hardened, and a soft-steel impression is taken from it, and the unfinished parts are then completed. This steel relief is in turn hardened, and by means of a powerful press is driven into a soft piece of steel, thus making a die which, when hardened, is ready for use for making coins or medals.

It often occurs that all the design can be produced in the die by cutting away the steel, and in that case no hub is taken; the die is fully completed and hardened for use.

Another method, and more modern, is this:

After the design for the coin or medal is settled upon, the engraver prepares a model in wax, or any material he may prefer to use, of the design selected, or as much of it as he may think most desirable for the production of the medal or coin. The model is generally made three, four, or five times as large as the finished work is intended to be. When the model is finished an electrotype is made. This electrotype when sufficiently strong is prepared for the reducing lathe, and a reduced copy is made the size required for the coin or medal, as the case may be.

The reducing lathe is a machine, working somewhat upon the principle of the pantograph, only in this case the one point traces or follows the form of the model, while another and much smaller point made in the form of a drill cuts away the material, and thus produces a reduction of the model. This process of reducing the design from the model is necessarily a very slow operation, as accuracy of the reduction depends entirely upon the slow motion of the machine and delicate handling of the operator. While it is not in the power of the operator or machine to improve the model, it is quite an easy matter, if not properly managed, for the machine to distort or the operator to lose the delicacy of the model.

The reducing machine can work either from a model in relief or intaglio, though the relief is more often used, and is considered the better way.

In describing this process, I have said the engraver makes a model of the design he wishes to produce, or as much as he thinks desirable. To explain more fully, I would say some designs or parts of a design are not calculated for reducing by machine, and therefore the engraver only reduces so much of the design as he knows from experience will give the desired effect; the rest he cuts in as described in first method of die engraving, namely, cut with gravers and chisels. When the reduction is made by the machine from the model it is then taken by the engraver and worked over and finished in all the detail and delicate parts, as the machine does not produce an entirely finished work. When finished by the engraver it is hardened and tempered. If the reduction has been made intaglio, when hardened it is completed and is called a die, and coins or medals can be struck from it; but if in relief, it is called a hub, and the process of making a die from it commences, which is done as follows:

The hub or relief being made hard, a piece of steel is prepared in the following manner to receive the impression of the hard hub: Take a block of steel sufficiently large to make your die, and carefully anneal it until it is quite soft. This is done by heating the steel to a bright red and allowing it to cool very gradually, being careful to exclude the air by packing the steel in carbon. The steel being soft, turn off the surface of the block of steel and smooth it before you commence the process called hubbing, which is as follows:

Place the block of soft steel under the plunger of a strong screw press; then put the hard relief or hub on top of the soft steel, and bring down your plunger with a good sharp blow. This will give you an impression upon the soft steel. In order to make a proper impression, the process of annealing the steel and the one just described, called hubbing, must be repeated many times, until you have a perfect impression of the hub. This being obtained, you have a die which only requires being hardened and tempered to be ready for use.

This last-described process of making dies is only followed for coinage and medal dies of the most artistic character. For all ordinary die work, such as is used by silversmiths and jewelers, the first-described method of engraving dies is generally used, it being quicker and sufficiently good for their use.

To harden the steel dies, they are packed in cast-iron boxes filled with carbon to exclude the air, and when heated to a bright red are cooled suddenly with water. As this would leave them too hard, and liable to crack and break on the edges, the

temper is what is technically called drawn, which is done by gently heating until you notice a color appearing upon the surface of the steel. A light straw color is a good color for cutting tools, but dies are generally brought to a deeper color, and in some cases to a blue.

COINAGE OPERATIONS.

By WILLIAM E. MORGAN.
Coiner of United States Mint at Philadelphia, Pa.

GOLD.

The ingots as received from the melter and refiner vary in size and weight according to the denomination of coin for which they are to be used. The following table gives the various sizes and approximate weights:

Denominations.	Approximate weight.	Length.	Thickness.	Width.
	Ounces.	*Inches.*	*Inches.*	*Inches.*
Double eagles	80	$12\frac{5}{8}$	$\frac{1}{2}$	$1\frac{1}{2}$
Eagles	62	$11\frac{1}{16}$	$\frac{1}{2}$	$1\frac{3}{16}$
Half eagles	40	12	$\frac{7}{16}$	$\frac{7}{8}$
Quarter eagles	33	$12\frac{1}{2}$	$\frac{7}{16}$	$\frac{11}{16}$

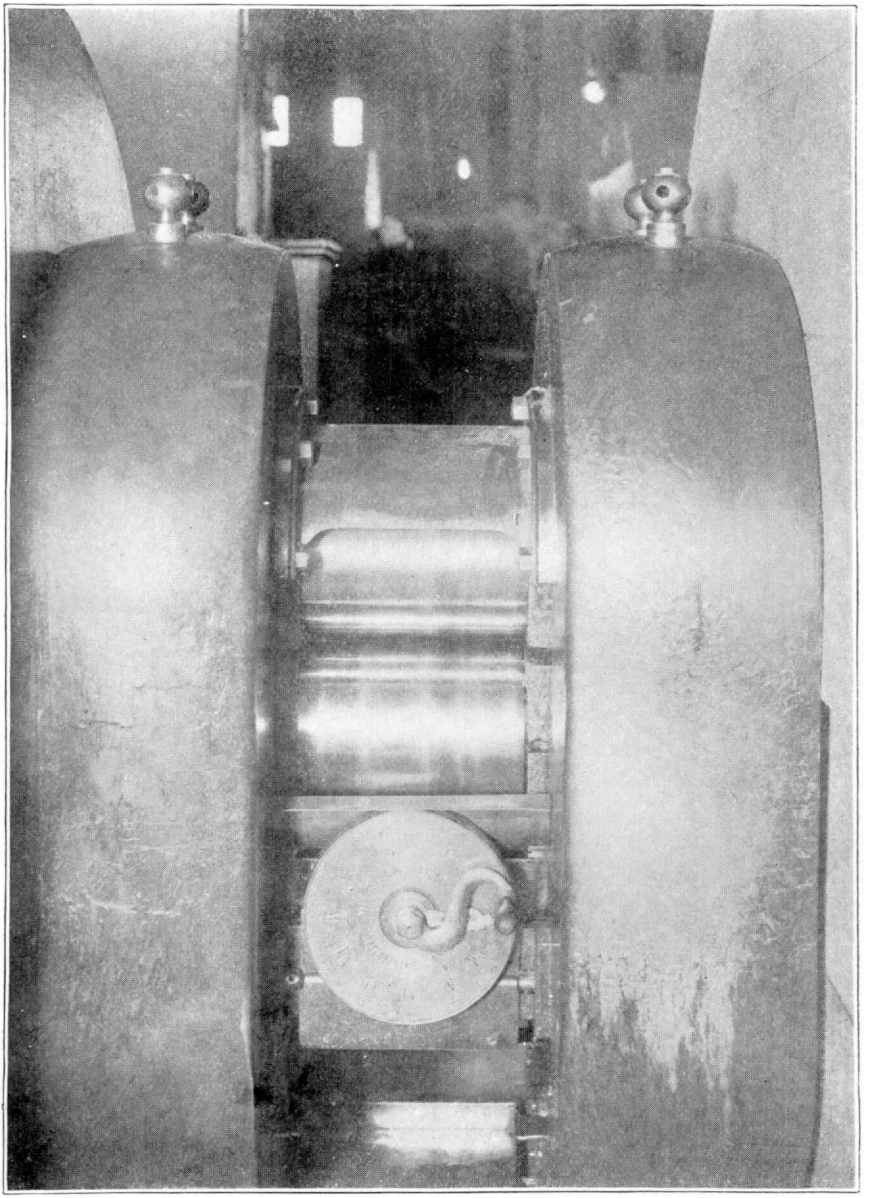
The first operation in converting ingots into coin, called "breaking down," is the passing of them between heavy rolls, which results in the ingot being formed into "strips."

To more clearly understand this, it may be said that the ingots are divided into drafts of from 40 to 60 ingots, and each draft passed between the "break-down" rolls a number of times, determined by the malleability of the metal. After each operation the rolls are tightened or brought closer together by means of wedges under the lower roll, which wedges are worked by means of a worm wheel. Such tightening of the rolls is shown by an indicator similar to a clock dial.

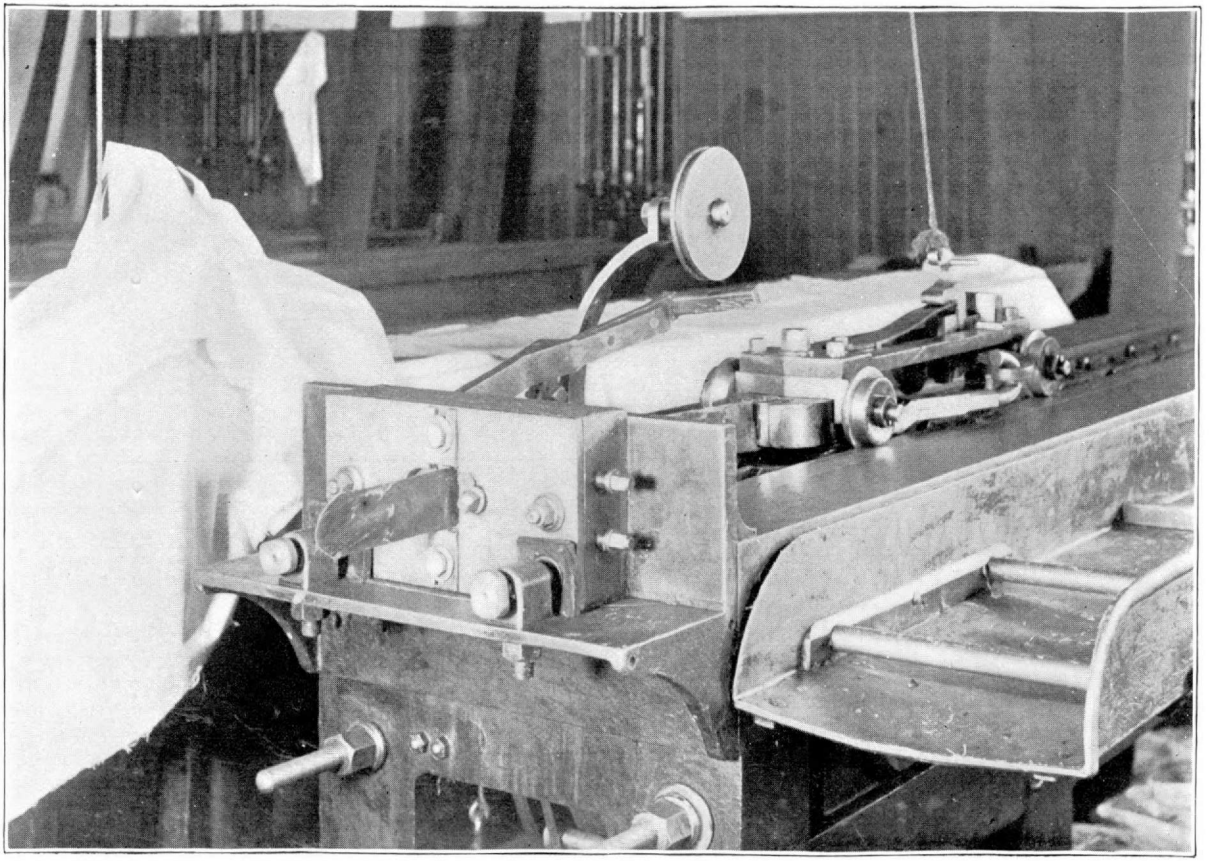
The following tables show the reduction of the ingot after each passage between the "break-down" rolls:

DOUBLE EAGLES.

Draft.	Dial indicator.	Length.	Thickness.	Width.
		Inches.	*Inches.*	*Inches.*
1	11.30	$14\frac{7}{16}$	$\frac{13}{32}$	$1\frac{23}{32}$
2	12.40	$15\frac{1}{2}$	$\frac{3}{8}$	$1\frac{17}{32}$
3	1.50	$17\frac{3}{8}$	$\frac{21}{64}$	$1\frac{17}{32}$
4	3	$19\frac{5}{8}$	$\frac{9}{32}$	$1\frac{9}{16}$
5	4.10	$22\frac{5}{8}$	$\frac{1}{4}$	$1\frac{9}{16}$
6	5.10	$26\frac{1}{4}$	$\frac{7}{32}$	$1\frac{9}{16}$
7	6.10	$31\frac{3}{8}$	$\frac{11}{64}$	$1\frac{19}{32}$
8	7	$35\frac{1}{2}$	$\frac{5}{32}$	$1\frac{19}{32}$
9	7.20	$39\frac{3}{4}$	$\frac{1}{8}$	$1\frac{19}{32}$



ROLLING MACHINE—SHOWING DIAL INDICATOR.



DRAW-BENCH, SHOWING STRIP PASSING BETWEEN THE DIES.

Draft.	Dial indicator.	Length.	Thickness.	Width.
		Inches.	*Inches.*	*Inches.*
EAGLES.				
1	12.30	13¾	13/36	1 7/32
2	1.45	15 7/16	23/64	1 11/64
3	3	17¾	5/16	1¼
4	4.15	20 1/16	17/64	1¼
5	5.30	25 3/16	13/64	1 9/32
6	6.45	30⅞	11/64	1 9/32
7	7.40	38½	9/64	1 9/32
8	8.15	46	7/64	1 19/64
HALF EAGLES.				
1	12.45	13⅜	3/8	1 5/16
2	2	14¾	5/16	61/64
3	3.15	16 9/16	9/32	63/64
4	4.30	19	19/64	1
5	5.45	22½	3/16	1 1/32
6	6.55	26⅞	5/32	1 1/16
7	7.45	32⅞	1/8	1 5/64
8	8.15	37⅝	7/64	1 5/64
QUARTER EAGLES.				
1	12.45	13⅞	23/64	33/32
2	2	15⅜	5/16	1
3	3.15	17½	17/64	15/32
4	4.30	19⅞	7/32	61/64
5	5.45	24	11/64	27/32
6	6.55	29⅝	9/64	55/64
7	7.45	37⅜	7/64	7/8
8	8.15	45¾	5/64	29/32

In "breaking down" ingots the metal becomes hard and springy, and further rolling than that indicated in the above tables, without softening, causes the strips to crack and split. To avoid this they are annealed as follows:

Inclosed in copper canisters, sealed with potters' clay to exclude air and thus prevent oxidation, the strips are placed in a furnace heated to about 1,500° F., where they remain for about one hour and a half, the time depending upon the heat of the furnace and the size of the strips.

After being cooled off in water, and each strip wiped dry, they are ready for further reduction in the finishing rolls.

Double eagles and eagles are passed through the finishing rolls three times, half eagles and quarter eagles four times, the dimensions of the resulting strips being shown in the following tables:

Draft.	Dial indicator.	Length.	Thickness.	Width.
		Inches.	*Inches.*	*Inches.*
DOUBLE EAGLES.				
1	7	47⅜	7/64	1⅝
2	7.50	54⅛	3/32	1⅝
3	7.50	63¼	5/64	1⅝

Draft.	Dial indicator.	Length.	Thickness.	Width.
		Inches.	*Inches.*	*Inches.*
1	7.33	$56\frac{3}{4}$	$\frac{6}{64}$	$1\frac{12}{64}$
2	7.55	$66\frac{1}{2}$	$\frac{5}{64}$	$1\frac{12}{64}$
3	8.05	$78\frac{7}{16}$	$\frac{4}{64}$	$1\frac{12}{64}$
HALF EAGLES.				
1	7.30	$46\frac{3}{8}$	$\frac{5}{64}$	$1\frac{3}{32}$
2	7.50	$54\frac{13}{16}$	$\frac{1}{16}$	$1\frac{3}{32}$
3	8.10	$65\frac{3}{8}$	$\frac{1}{16}$	$1\frac{3}{32}$
4	8.20	$75\frac{1}{2}$	$\frac{3}{64}$	$1\frac{3}{32}$
QUARTER EAGLES.				
1	7.50	$52\frac{7}{8}$	$\frac{5}{64}$	$\frac{23}{32}$
2	8.05	$66\frac{1}{4}$	$\frac{1}{16}$	$\frac{22}{32}$
3	8.35	78	$\frac{3}{64}$	$\frac{22}{32}$
4	8.50	$94\frac{1}{2}$	$\frac{1}{32}$	$\frac{22}{32}$

It has been found impracticable to roll strips so as to give planchets of exact standard weight, and after leaving the finishing rolls the strips are of such thickness that planchets cut therefrom will vary from the standard weight as follows:

Denominations.	Grains heavy.
Double eagles	20 to 24
Eagles	10 12
Half eagles	6 8
Quarter eagles	4 5

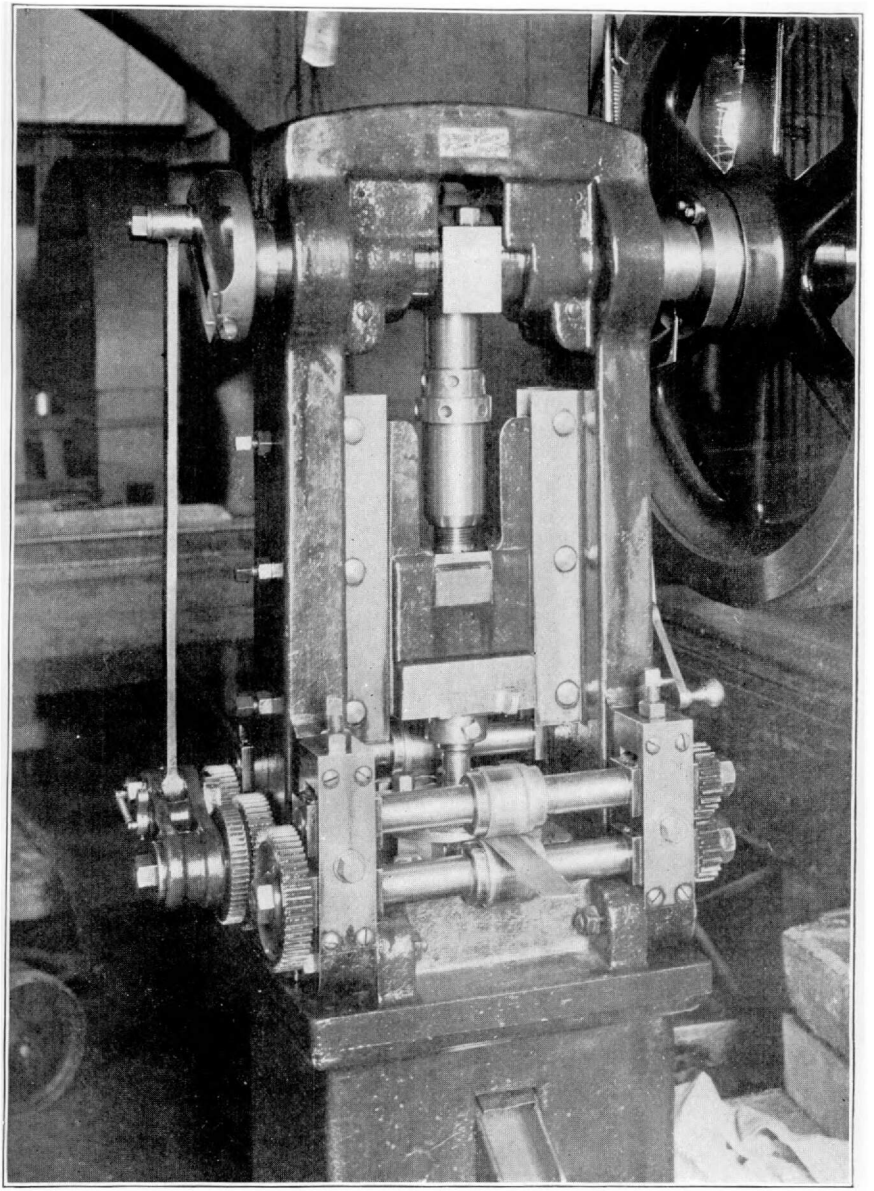
This excess of weight is reduced by the "draw benches."

The strips upon leaving the finishing rolls are again annealed, cut in two for convenience in handling, and taken to the pointing rolls that about 1½ inches of the end may be pointed or flattened to permit their easy passage through the dies of the draw bench, and they are then greased with tallow.

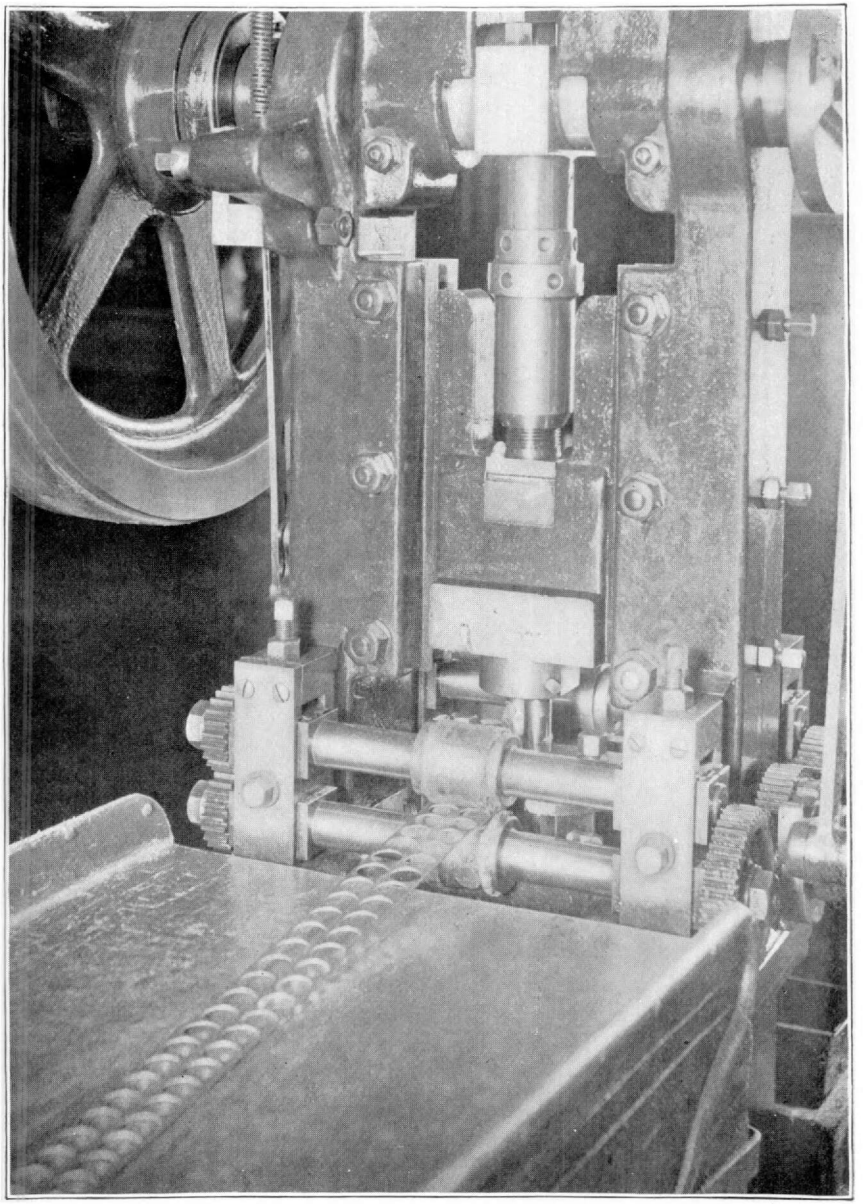
The draw benches are double, each section being independent in its action of the other. Each section has two dies regulated by set screws; between these dies the pointed end of the strip is passed, and being seized by the jaws of the carriage, which is drawn by means of an endless chain, the strip is drawn through and reduced as near as may be to standard weight. This operation is similar to that of wire drawing.

When the strips are drawn to the proper weight, which is ascertained by weighing sample planchets cut from either end, they are taken to the cutting shears and the pointed ends cut off to avoid the possibility of a planchet being cut out of the same. This done, the strips are taken to the cutting press, and by means of a steel punch, working into a matrix, the planchets are cut therefrom.

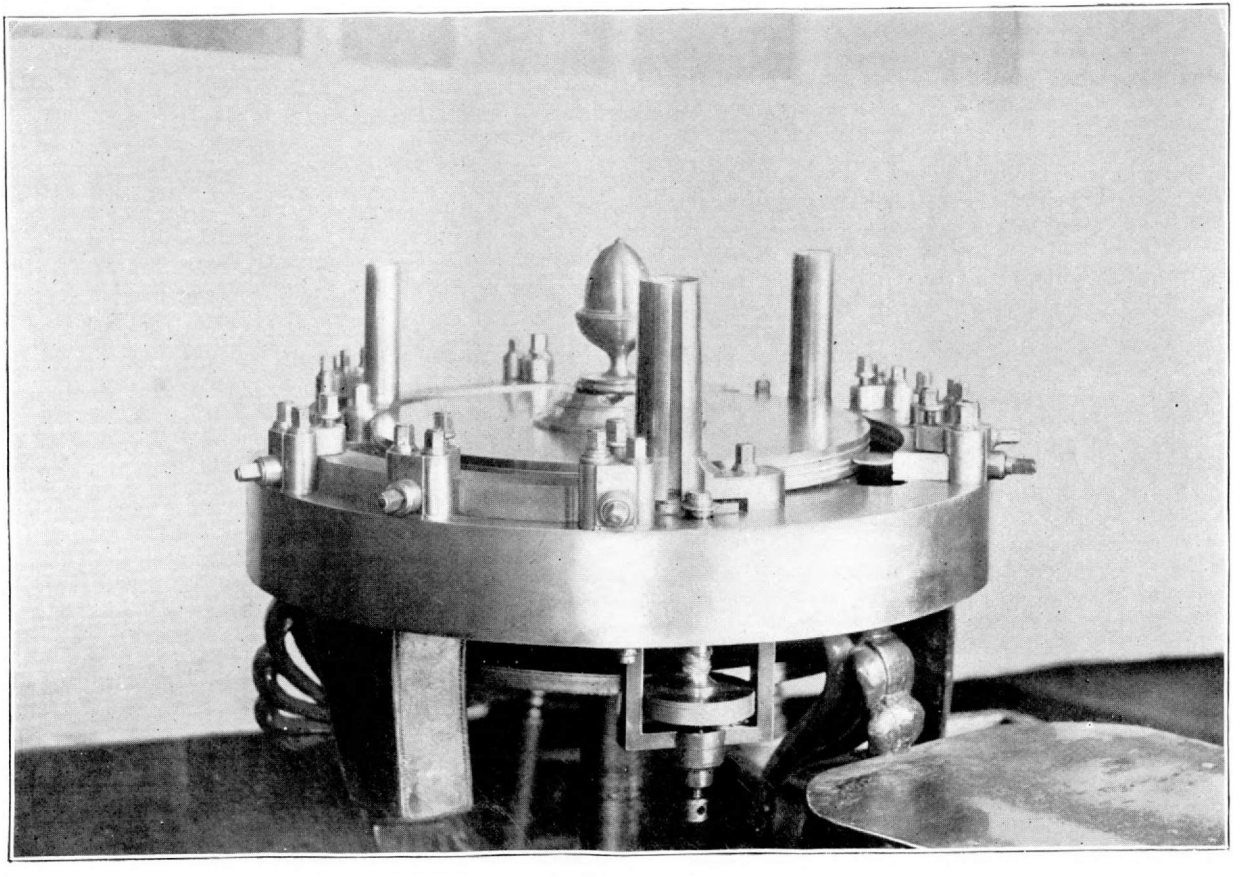
The planchets, together with the resulting perforated strips, spoiled pieces, and chips, are taken to the wash room and thoroughly cleansed of the grease by washing in a lye compound of soap, borax, and water. After rinsing in clean water they are dried in a large copper pan which is heated by steam. The planchets are then taken to the selecting tables and all perfect blanks separated from the imperfect ones, chips, etc. The latter, together with the perforated strips, are returned to the melter and refiner to be remelted, while the former are sent to the adjusting room.



CUTTING PRESS—FRONT VIEW, SHOWING THE STRIP BETWEEN THE FEED ROLLS.



CUTTING PRESS—BACK VIEW, SHOWING PERFORATED STRIP AFTER THE PLANCHET HAS BEEN CUT.



MILLING MACHINE.

The standard or legal weight of gold coin is:

Denominations.	Grains.
Double eagle	516
Eagle	258
Half eagle	129
Quarter eagle	64.5

The tolerance allowed by law on individual pieces is:

Denominations.	Grains.
Double eagle	0.50
Eagle	.50
Half eagle	.25
Quarter eagle	.25

Each piece is weighed in the adjusting room, and if found to be heavier than the legal limit, is reduced within the limit by filing the edge of the planchet; if lighter than the legal limit, it is condemned and returned to the melter and refiner to be remelted.

Those planchets which have been adjusted are then taken to the milling machines to undergo the operation of having the raised edge (technically termed "milling") put on them. The milling protects the surface of the coin from abrasion.

In the milling machines the planchets are fed by hand into a vertical tube, and, one by one, are caused to rotate in a horizontal plane in a groove formed on one side by a revolving wheel and on the other by a fixed segment of corresponding groove. Each piece as it passes through this narrow groove has its edge evenly forced up into a border or rim.

The milled pieces are then taken to the cleaning room to be cleaned. To facilitate the cleaning, as well as to soften the pieces for the imprint of the dies, they are again annealed by heating to a cherry red, then dipped into a solution of sulphuric acid and water sufficiently strong to clean and brighten them.

After being thoroughly rinsed in boiling water they are hand riddled in sawdust to dry them, and are then ready for the stamping press.

The most important operation in the stamping of a piece is the adjustment of the dies in the press. This adjustment requires great skill and long experience, much depending upon the character of the metal to be operated upon.

The pieces are fed to the press through a vertical tube, and as each piece reaches the bottom of the tube steel feeders carry it over between the dies, place it in a steel collar, when the dies close upon the planchet and the obverse and reverse impressions are made.

The inner rim of the collar is reeded or fluted, and the planchet before being struck is slightly less in diameter than the collar; but the pressure upon the dies causes the piece to expand in the collar and takes from it the reeding on its edge.

The following table shows the pressure necessary to bring up a sharp, clear impression on the various denominations of gold coins:

Denominations.	Pressure.
	Tons.
Double eagle	175
Eagle	120
Half eagle	75
Quarter eagle	40

Double eagles and eagles are struck at an average rate of 80 per minute, while half eagles and quarter eagles are struck at the average rate of 100 per minute.

SILVER.

With the exception of annealing, the operations incidental to the coinage of silver are the same as for gold.

Silver strips are not inclosed in canisters while being annealed, as was the case with gold, but are subjected on the open hearth of a furnace to a dull red heat. Although a reducing temperature is sought to be preserved, the strips become tarnished or oxidized on the surface from the formation of a slight film of copper oxide.

This film is easily removed from the planchets by immersion in a weak solution of sulphuric acid.

After the planchets have been whitened they are placed in a revolving riddle, filled with sawdust, that they may be dried and brightened.

The standard or legal weight of silver coin is:

Denominations.	Grains.
Dollar	412.50
Half dollar	192.90
Quarter dollar	96.45
Dime	38.58

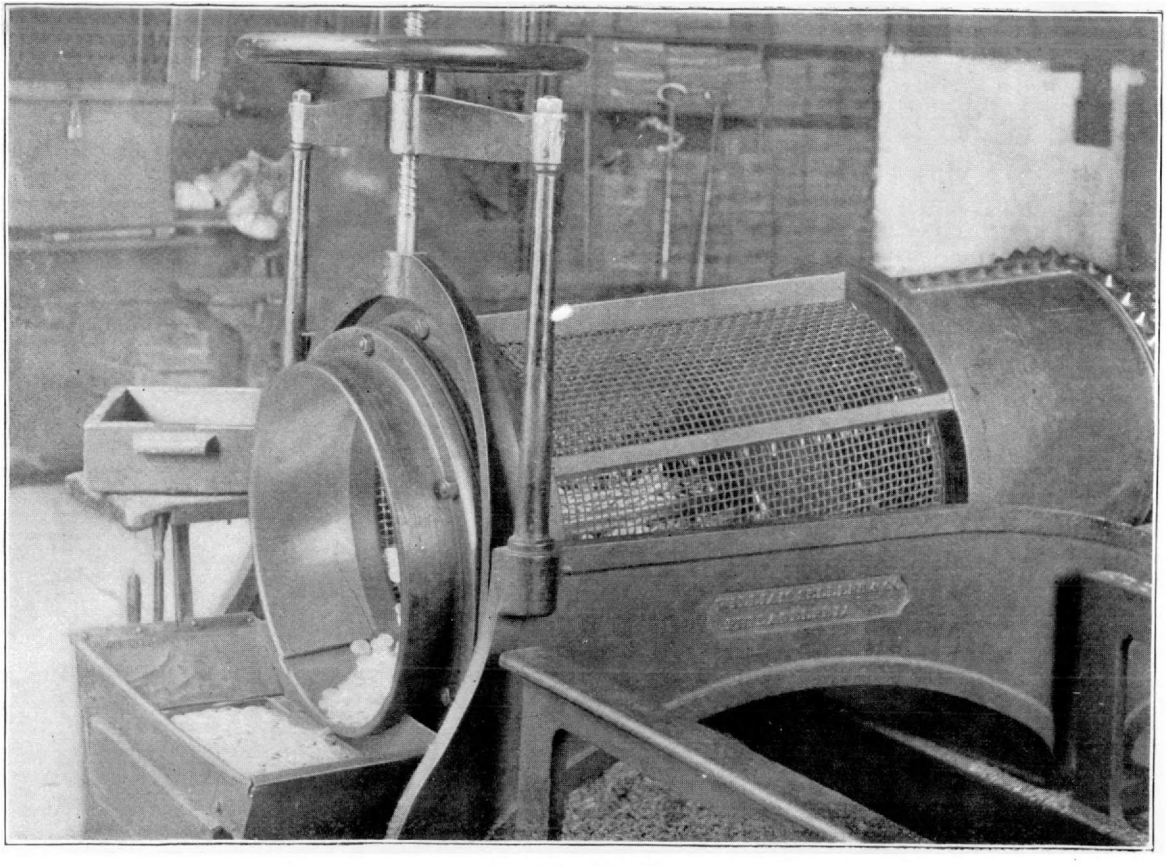
The deviation from the standard weight allowed by law on individual silver pieces is 1.5 grains.

Dimes are not adjusted. If any piece is found to be above or below the limit of tolerance it is marked "condemned" and remelted, and therefore greater care has to be exercised in the management of the draw benches that the percentage of condemned dime planchets may be reduced to a minimum.

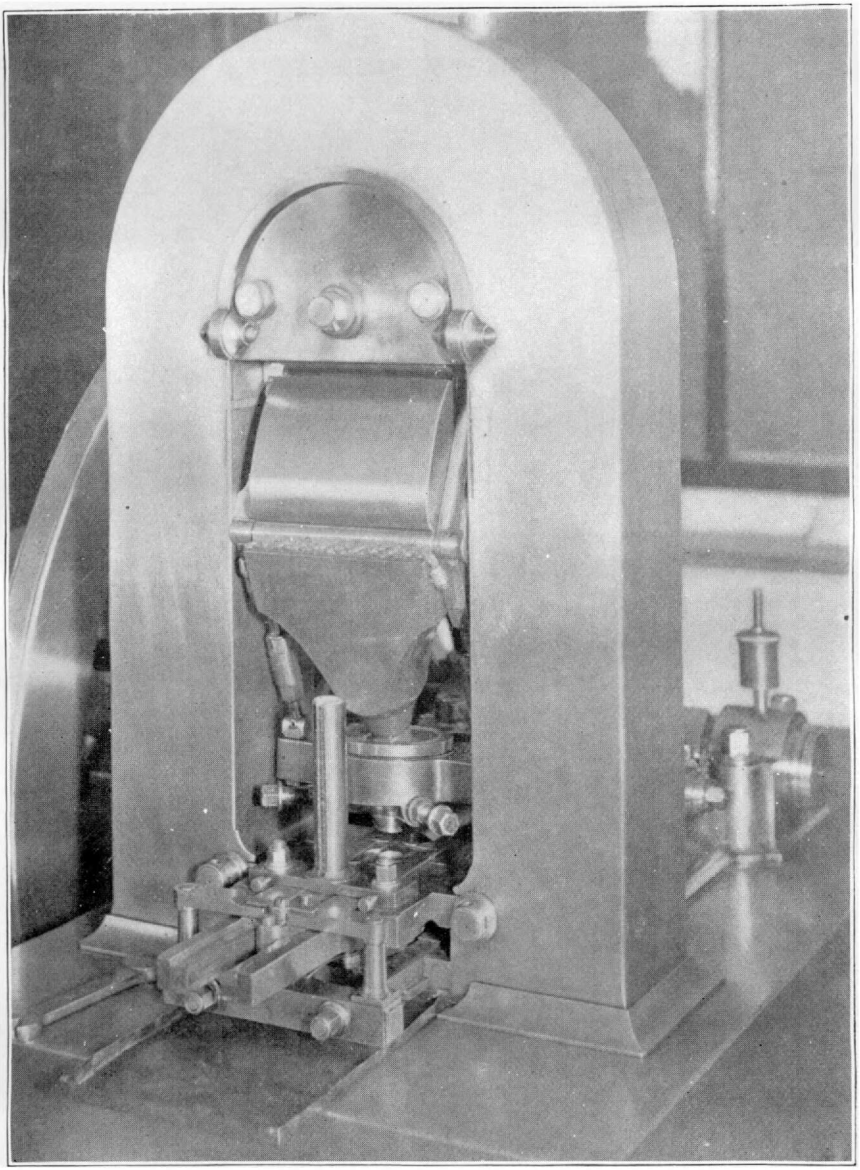
The pressure used in stamping silver coins is:

Denominations.	Pressure.
	Tons.
Dollar	150
Half dollar	110
Quarter dollar	80
Dime	40

Silver dollars, half dollars, and quarter dollars are struck at an average rate of 80 per minute, while dimes are struck at an average rate of 100 per minute.



REVOLVING RIDDLE.



COINING PRESS.

COUNTING.

As before stated, there is a limit of tolerance on individual pieces, but all coins are far within this limit. Those pieces that are heavier than the standard weight are termed "heavies;" those that are lighter than standard weight are termed "lights."

Gold coin is put up in drafts of $5,000 each. The legal weight of $5,000 in gold coin is 268.75 troy ounces, but there is a deviation allowed by law of one-hundredth of an ounce from this legal weight. In making up the drafts the "lights," "heavies," and "standards" are mixed so that the deviation from 268.75 ounces shall not exceed one-hundredth of an ounce.

Silver coin is put up in drafts of $1,000 each. The legal weight of $1,000 in standard silver dollars is 859.375 troy ounces, and of $1,000 in subsidiary silver—that is, half dollars, quarter dollars, and dimes—803.75 ounces. In making up drafts the "lights," "heavies," and "standards" are mixed so that the deviation from the legal weight of $1,000 in dollars, half dollars, or quarter dollars, shall not exceed two-hundredths of an ounce, and one-hundredth of an ounce in $1,000 in dimes.

MONETARY STATISTICS OF FOREIGN COUNTRIES.

The statistics of the production and coinage of the precious metals, imports and exports of gold and silver, amount of bank and Government notes, both covered and uncovered, of the different foreign countries, published annually in the reports of this Bureau, are obtained directly from the governments of such countries by the representatives of the United States accredited to them.

A list of the interrogatories, covering the points on which information is sought from the governments of foreign countries, is sent yearly to the United States ambassadors and ministers through the Department of State, and the replies in the form of reports are forwarded directly to the Bureau of the Mint.

The interrogatories for 1895 were as follows:

(1) What was the amount of gold coined during the calendar year 1895, by denominations and values? What amount was recoined (withdrawn from circulation) during the year, domestic and foreign coins separately.

(2) Same question as to silver.

(3) What was the weight of fine gold used in the industrial arts during the calendar year 1895?

(4) What amount of this was new gold, and what amount old gold?

(5) What was the weight of fine silver used in the industrial arts during the calendar year 1895?

(6) What amount of this was new silver, and what amount old silver?

(7) What was the import and export of gold during the calendar year 1895? (Coin, bullion, and ore, as well as their weight and value, should be given separately, if possible.)

(8) Same question as to silver.

(9) What was the total import of United States gold coin during the year?

(10) What was the total import of gold from the United States direct in 1895?

(11) What was the amount of United States gold coin deposited at the mints and melted?

(12) What was the weight expressed in kilograms, fine, and the value of the gold produced from the mines of the country during the calendar year 1895?

(13) Same question as to silver. (In answering this interrogatory state whether the value given is commercial or coining value.)

(14) What were the weight and value of the output of gold from the refineries of the country during the year?

(15) Same question as to silver.

(16) What, approximately, was the stock of gold coin and bullion in the country at the close of the calendar year 1895?

(17) Same question as to silver.

(18) What was the amount of Government notes outstanding at the end of the year 1895?

(19) What was the amount of bank notes outstanding at the end of the year 1895?

(20) What was the amount of uncovered Government notes at the end of the year 1895?

(21) What was the amount of uncovered bank notes at the end of the year 1895?

(22) What was the actual currency of the country—gold and silver, or inconvertible paper?

(23) Is gold at a premium as compared with the actual currency of the country; and if it is, what was the average premium during the year 1895?

(24) What was the average rate of exchange on London during the year 1895?

(25) Were any laws passed during the year 1895 affecting the coinage, issue, or legal-tender character of the metallic or paper currency? If so, please transmit copies of the same.

(26) Is there a report published of the operations of the mint? If so, please forward a copy of the same.

It is usual for this Bureau to supplement the information received through our foreign representatives by other statistical data obtained from printed documents, both official and nonofficial.

For special information kindly furnished the Bureau the Director desires to express his personal obligations to the following gentlemen: Hon. Horace Seymour, deputy master of the royal mint, London; Hon. George Anderson, deputy master of the mint, Melbourne, Australia; Hon. J. H. W. Hart, assistant secretary of the Government of India; Mr. J. Stavoli, chief of the bureau of statistics, Mexico; to the chancellor of the exchequer, Russia; the directors of the mints of Japan, the Netherlands, Paris, Berlin, Madrid, Vienna, and Kremnitz; Mr. Augustus Sauerbeck, London, and Mr. Ottomar Haupt, Paris.

The replies to the interrogatories, which are given in full in the appendix (LI, p. 313) to this report, are indicated by the numbers of the questions.

In the list of questions propounded to foreign governments for the calendar year 1895 were the following:

What was the total import of United States gold coin during the year? and

What was the amount of United States gold coin deposited at the mints and melted?

The following table shows the countries from which answers to these two interrogatories were received, the amount of United States gold coin imported by them, and the value of the United States gold coin melted at their mints:

Countries.	Amount imported.	Amount melted.
Argentina	$1,400,000	
Austria-Hungary		$4,208,816
Germany	6,413,390	8,383,772
Netherlands		55,826
Total	7,813,390	12,648,414

IMPORTS AND EXPORTS OF THE PRINCIPAL COUNTRIES OF THE WORLD.

The imports and exports of the precious metals of the principal countries of the world during the calendar year 1895 are exhibited in the following table. The information relating to foreign countries was received through representatives of the United States in them:

IMPORTS AND EXPORTS OF THE PRECIOUS METALS IN THE PRINCIPAL COUNTRIES OF THE WORLD, 1895.

GOLD COIN AND BULLION.

Countries.	Imports.	Exports.	Excess of imports over exports.	Excess of exports over imports.
United States	$34,369,514	$105,020,843		$70,651,329
Argentina	6,559,353		$6,559,353	
Australasia		26,106,806		26,106,806
Austria-Hungary	27,645,892	11,617,791	16,028,101	
Chile	9,490,293	3,199,406	6,290,887	
China	243,819	5,543,643		5,299,824
Denmark	2,261,920	536,000	1,725,920	
Egypt	25,599,782	12,419,401	13,180,381	
France	48,872,298	47,165,473	1,706,825	
Great Britain	176,197,803	104,094,683	72,103,120	
Germany	23,193,328	19,574,609	3,618,719	
Hawaii	370,225		370,225	
India	23,823,648	11,858,212	11,965,436	
Italy	1,030,427	3,262,472		2,332,045
Japan	1,029,912	2,791,952		1,762,040
Korea		1,332,929		1,332,929
Mexico		5,141,418		5,141,418
Netherlands	1,385,000	305,124	1,079,876	
Paraguay	175		175	
Portugal	979,274	2,267,537		1,288,263
Peru		62,128		62,128
Russia	19,486,233	185,070	19,301,163	
Siam	730,525	52,117	678,408	
Spain	116,614	109,549	7,065	
Sweden	23,550		23,550	
Switzerland	7,742,375	4,030,768	3,711,607	

IMPORTS AND EXPORTS OF THE PRECIOUS METALS IN THE PINCIPAL COUNTRIES OF THE WORLD, 1895—Continued.

SILVER COIN AND BULLION.

Countries.	Imports.	Exports.	Excess of imports over exports.	Excess of exports over imports.
United States	$24,976,723	$54,892,189	.....	$29,915,466
Austria-Hungary	1,395,736	1,097,257	$298,479	.....
Chile	1,727,213	3,238,459	.....	1,511,246
China	38,157,895	8,809,393	29,348,502	.....
Egypt	286,007	427,515	.....	141,508
France	27,227,348	17,163,361	10,063,987	.....
Great Britain	60,428,333	52,209,705	8,218,628	.....
Germany	2,389,088	5,547,817	.....	3,158,729
Hawaii	3,007	21,825	.....	18,818
India	39,500,498	8,320,510	31,179,988	.....
Italy	432,127	1,655,940	.....	1,223,813
Japan	4,844,252	24,509,747	.....	19,665,495
Mexico	.....	51,639,657	.....	51,639,657
Netherlands	1,128,354	22,310	1,106,044	.....
Norway	710,120	86,832	623,288	.....
Portugal	255,199	218,933	36,266	.....
Peru	4,088,554	539	.....	4,088,015
Russia	21,536,271	1,762,512	19,773,759	.....
Siam	4,534,099	1,196,699	3,337,400	.....
Spain	4,564,073	8,033,429	.....	3,469,356
Sweden	304,378	31,627	272,751	.....
Switzerland	10,835,343	5,025,086	5,810,257	.....

The table following exhibits the value of the gold and silver bullion and coin imported into and exported from the United States from and into Great Britain from 1874 to 1895, inclusive.

VALUE OF GOLD AND SILVER IMPORTED INTO AND EXPORTED FROM THE UNITED STATES FROM AND INTO GREAT BRITAIN AND IRELAND.

GOLD BULLION AND COIN.

Fiscal year.[a]	Imports.	Exports.	Excess of imports over exports.	Excess of exports over imports.
1874	$44,261	$21,941,783	.....	$21,897,522
1875	2,806,311	40,185,922	.....	37,379,611
1876	17,150,938	21,274,902	.....	4,123,964
1877	5,682,271	10,034,324	.....	4,352,053
1878	4,032,112	4,216,010	.....	183,898
1879	33,817,688	1,889,418	$31,928,270	.....
1880	26,823,600	269,431	26,554,169	.....
1881	35,947,633	112,859	35,834,774	.....
1882	448,701	29,684,594	.....	29,235,893
1883	4,562,437	47,580	4,514,857	.....
1884	10,627,477	24,683,345	.....	14,055,868
1885	1,456,700	530,665	926,035	.....
1886	14,575,484	12,556,212	2,019,272	.....
1887	8,568,758	180,110	8,388,648	.....
1888	19,169	10,956,287	.....	10,937,118
1889	50,125	13,608,778	.....	13,558,653
1890	4,923,034	12,624,961	.....	7,701,927
1891	15,391,766	37,351,283	.....	21,959,517
1892	641,385	5,110,827	.....	4,469,442
1893	28,796,540	20,595,062	8,201,478	.....
1894	1,459,590	15,799,647	.....	14,340,057
1895	16,146,069	54,173,664	.....	38,027,595
Total	233,972,049	337,827,664	118,367,503	222,223,118
Excess	.....	103,855,615	.....	103,855,615

SILVER BULLION AND COIN.

1874	$122,879	$16,918,981	.....	$16,796,102
1875	43,448	15,481,341	.....	15,437,893
1876	1,841,683	12,834,099	.....	10,992,416
1877	1,449,682	12,730,380	.....	11,280,698
1878	5,269,384	7,870,002	.....	2,600,618
1879	2,989,588	12,632,115	.....	9,642,527
1880	163,125	5,832,816	.....	5,669,691
1881	152,531	12,644,788	.....	12,492,257
1882	143,172	9,355,681	.....	9,212,509
1883	236,755	13,643,442	.....	13,406,687
1884	40,548	12,795,566	.....	12,755,018
1885	29,253	13,648,158	.....	13,618,905
1886	13,943	8,259,345	.....	8,245,402
1887	172,026	10,773,185	.....	10,601,159
1888	157,280	11,600,485	.....	11,443,205
1889	151,591	19,348,927	.....	19,197,336
1890	3,161,262	19,746,841	.....	16,585,579
1891	41,755	19,387,377	.....	19,345,622
1892	88,794	26,807,663	.....	26,718,869
1893	14,780	35,371,119	.....	35,356,339
1894	10,847	35,267,598	.....	35,256,751
1895	37,054	39,335,554	.....	39,298,500
Total	16,331,380	372,285,463	.....	355,954,083
Excess	.....	355,954,083	.....	.....

[a] British fiscal year ended March 31.

The following table exhibits the value of gold and silver bullion and coin imported into and exported from the United States from and into France from 1879 to 1895, inclusive.

VALUE OF GOLD AND SILVER IMPORTED INTO AND EXPORTED FROM THE UNITED STATES FROM AND INTO FRANCE.

GOLD BULLION AND COIN.

Fiscal year.	Imports.	Exports.	Excess of imports over exports.	Excess of exports over imports.
1879	$1,230,447	$128,424	$1,102,023	
1880	33,383,297	2,649	33,380,648	
1881	18,219,558	450	18,219,108	
1882	1,495,006	2,590,050		$1,095,044
1883	104,220		104,220	
1884	3,969,915	5,015,767		1,045,852
1885	3,113,347	6,300	3,107,047	
1886	4,427,555	11,578,912		7,151,357
1887	12,433,314	37,135	12,396,179	
1888	9,570,658	44,166	9,526,492	
1889	1,558,341	23,026,482		21,468,141
1890	2,353,764	5,431,373		3,077,609
1891	472,850	14,659,015		14,186,165
1892	15,845,817	13,061,100	2,784,717	
1893	5,399,599	32,240,402		26,840,803
1894	10,742,507	15,450,000		4,707,493
1895	7,845,583	28,625,400		20,779,817
Total	132,165,778	151,897,625	80,620,434	100,352,281
Excess		19,731,847		19,731,847

SILVER BULLION AND COIN.

1879	$259,097	$126,666	$132,431	
1880	24,274	89,431		$65,157
1881	1,267	75,850		74,583
1882	21,064	810,400		789,336
1883	212	1,381,214		1,381,002
1884	1,635	796,788		795,153
1885	919	830,115		829,196
1886	146,477	585,157		438,680
1887	70,139	980,713		910,574
1888	227,566	601,809		374,243
1889	1,906	371,850		369,944
1890	1,351	134,535		133,184
1891		399,684		399,684
1892	360,433	1,412,624		1,052,191
1893	1,351	462,898		461,547
1894	21,595	201,000		179,405
1895	5,126	1,500	3,626	
Total	1,144,412	9,262,234	136,057	8,253,879
Excess		8,117,822		8,117,822

The following table exhibits the value of gold and silver bullion and coin imported into and exported from the United States from and into Germany from 1879 to 1895, inclusive:

VALUE OF GOLD AND SILVER IMPORTED INTO AND EXPORTED FROM THE UNITED STATES FROM AND INTO GERMANY.

GOLD BULLION AND COIN.

Fiscal year.	Imports.	Exports.	Excess of imports over exports.	Excess of exports over imports.
1879		$6,600		$6,600
1880	$3,128,185	15,850	$3,112,335	
1881	31,406,112	4,157	31,401,955	
1882	4,596,964	82,560	4,514,404	
1883	2,299,665	32,600	2,267,065	
1884	3,079,605	1,115,674	1,963,931	
1885	7,938,164	57,039	7,881,125	
1886	5,921,677	3,882,799	2,038,878	
1887	12,744,269	2,000,180	10,744,089	
1888	18,265,659	6,637,241	11,628,418	
1889	1,259,139	8,709,652		7,450,513
1890	1,756,884	2,297,808		540,924
1891	2,758,812	16,530,377		13,771,565
1892	3,920,742	19,308,050		15,387,308
1893	478,811	37,913,100		37,434,289
1894	14,437,867	28,811,650		14,373,783
1895	1,376,762	14,857,754		13,480,992
Total	115,369,317	142,263,091	75,552,200	102,445,974
Excess		26,893,774		26,893,774

SILVER BULLION AND COIN.

1879	$45,399	$348,432		$303,033
1880	15,465	383,830		368,365
1881	96,231	472,029		375,798
1882	296,697	649,628		352,931
1883	271,052	335,455		64,403
1884	39,194	1,914,560		1,875,366
1885	9,538	282,609		273,071
1886	34,386	99,333		64,947
1887	177,855	83,389	$94,466	
1888	135,078	151,276		16,198
1889	19,015	575	18,440	
1890	750,633	32,712	717,921	
1891	845,901	910	844,991	
1892	91,413	107,666		16,253
1893	9,688	4,500	5,188	
1894	1,905	94,950		93,045
1895	12,328	81,317		68,989
Total	2,851,778	5,043,171	1,681,006	3,872,399
Excess		2,191,393		2,191,393

For convenience of reference the more important statistical data relative to foreign countries and contained in the answers to the interrogatories and other authentic sources are condensed into the following tables:

ARGENTINA.

Items reported for 1895.	Kilograms.	Value in United States money.
Gold produced	473.86	$314,927.36
Silver produced	10,210.00	424,327.60

AUSTRALASIA.

Items reported for 1895.	Pounds sterling.	Value in United States money.
Gold coinage	6,923,869	$33,695,008.40
Gold produced		44,798,300.00
Silver produced		16,171,100.00

AUSTRIA-HUNGARY.

Items reported for 1895.	Florins.	Value in United States money.
Gold coinage	44,937,631.24	$18,208,728.17
Silver coinage	26,829,982.50	6,819,508.91
Silver coinage, levantine dollars		2,236,678.92
Gold recoinage		15,943,627.38
United States gold coin melted		4,208,816.00
Silver recoinage		3,318,655.59
Gold produced		1,989,000.00
Silver produced		2,824,100.00

BRITISH GUIANA.

Items reported for 1895.	Fine ounces.	Value in United States money.
Gold produced	107,059	$2,213,100

BRITISH HONDURAS.

Items reported for 1895.	Pounds sterling.	Value in United States money.
Silver coinage	6,165	$30,000

BRITISH INDIA.

Items reported for 1895.	Rupees.	Value in United States money.
Silver coinage	8,539,022.25	$4,044,934.83
Silver received for recoinage	1,022,900.00	484,547.73
Gold produced		4,656,200.00

CANADA.

Items reported for 1895.	Fine ounces.	Value in United States money.
Gold produced	92,440	$1,910,900
Silver produced	1,775,658	2,295,800

CENTRAL AMERICAN STATES.

Items reported for 1895.	Francs.	Value in United States money.
Gold coinage	750	$144.75
Silver coinage		500,000.00

CEYLON.

Items reported for 1895.	Rupees.	Value in United States money.
Silver coinage	500,000	$236,850

CHILE.

Items reported for 1895.	Pesos.	Value in United States money.
Gold coinage	22,891,542.00	$8,353,212.00
Gold recoinage	14,033,333.33	5,121,930.91
Silver coinage	6,115,154.00	4,243,919.08
Gold coin in circulation	23,085,195.00	8,425,708.34
Silver coin in circulation	12,255,099.40	8,505,038.98
Gold production		1,407,600.00
Silver production		6,505,900.00

CHINA.

Items reported for 1895.	Value in United States money.
Silver coinage	$8,259,340

ECUADOR.

Items reported for 1895.	Value in United States money.
Silver coinage	$1,102,073

FRANCE.

Items reported for 1895.	Francs.	Value in United States money.
Gold coinage	108,006,930	$20,845,337.49
Gold recoinage	3,483,130	672,244.09
Silver coinage	8,000,000	1,544,000.00

GERMAN NEW GUINEA COMPANY.

Items reported for 1895.	Marks.	Value in United States money.
Gold coinage	50,000	$11,900

GERMANY.

Items reported for 1895.	Marks.	Value in United States money.
Gold coinage	107,514,010	$25,588,334.38
Gold recoinage	291,930	69,479.34
Gold coins melted (United States)	.....	8,383,771.57
Gold coins melted (foreign)	.....	12,837,155.87
Silver recoinage	7,672,429	1,826,038.10
Gold produced	.....	2,223,100.00
Silver produced	.....	7,522,400.00

GREAT BRITAIN.

Items reported for 1895.	Pounds sterling.	Value in United States money.
Gold coinage	3,810,636	$18,547,229
Gold recoinage	.....	11,679,600
Silver coinage	1,187,010	5,776,584
Silver recoinage	.....	2,160,731
Gold produced	.....	107,000
Silver produced	.....	362,500

GUIANA (DUTCH).

Items reported for 1895.	Fine ounces.	Value in United States money.
Gold produced	23,597	$487,800

HAITI.

Items reported for 1895.	Francs.	Value in United States money.
Silver coinage	3,783,861	$730,285.17

HONGKONG.

Items reported for 1895.	Value in United States money.
Silver coinage	$2,200,000

INDO-CHINA.

Items reported for 1895.	Value in United States money.
Silver coinage	$6,092,709

JAPAN.

Items reported for 1895.	Yens.	Value in United States money.
Gold coinage	1,515,000	$1,515,000
Silver coinage	23,883,505	23,883,505
Silver recoinage	1,594	1,594
Gold produced		*a* 517,100
Silver produced		*a* 2,799,300

a Product of Imperial mines, 1895; private mines, 1893.

KOREA.

Items reported for 1895.	Fine ounces.	Value in United States money.
Gold produced	33,824	$699,200

MEXICO.

Items reported for 1895.	Fine ounces.	Value in United States money.
Gold coinage		$504,193
Silver coinage		24,832,351
Gold produced	290,250	6,000,000
Silver produced	46,962,738	60,719,500

MONACO.

Items reported for 1895.	Francs.	Value in United States money.
Gold coinage	2,000,000	$386,000

MOROCCO.

Items reported for 1895.	Francs.	Value in United States money.
Silver coinage	1,837,463	$354,630.35

NETHERLANDS.

Items reported for 1895.	Florins.	Value in United States money.
Gold coinage	337,543	$135,692.28
Gold recoinage	1,080	434.16
Gold coins melted (United States)		55,826.40
Silver coinage	350,000	140,700.00

NORWAY.

Items reported for 1895.	Kronen.	Value in United States money.
Silver coinage	300,000	$80,400
Silver recoinage	40,500	10,854
Silver produced		252,800

PERU.

Items reported for 1895.	Fine ounces.	Value in United States money.
Silver coinage		$4,073,270.38
Gold produced	3,086	63,800.00
Silver produced	3,162,973	4,089,500.00

PORTUGAL.

Items reported for 1895.	Milreis.	Value in United States money.
Silver coinage	111,000	$119,880

PUERTO RICO.

Items reported for 1895.	Pesetas.	Value in United States money.
Silver coinage	43,467,469	$8,389,221.52

RUSSIA.

Items reported for 1895.	Rubles.	Value in United States money.
Gold coinage	50,000,560.00	$38,590,432.20
Gold recoinage (domestic)	4,660.00	3,596.59
Gold coins melted (foreign)	710.00	547.98
Silver coinage	4,789,054.10	3,696,192.00
Silver recoinage	633,516.00	488,947.64
Gold produced		28,894,400.00
Silver produced		519,300.00

SIAM.

Items reported for 1895.	Ticals.	Value in United States money.
Silver coinage	4,316,372	$2,589,823.20

SPAIN.

Items reported for 1895.	Pesetas.	Value in United States money.
Silver coinage	1,065,537	$205,648.64
Silver recoinage	715,431	138,078.18
Silver produced		4,563,500.00

STRAITS SETTLEMENTS.

Items reported for 1895.	Value in United States money.
Silver coinage	$450,446

SWEDEN.

Items reported for 1895.	Kronen.	Value in United States money.
Gold coinage	3,346,720	$896,920.96
Gold produced	.....	52,500.00
Silver produced	.....	49,300.00

SWITZERLAND.

Items reported for 1895.	Francs.	Value in United States money.
Gold coinage	4,000,000	$772,000
Silver coinage and recoinage	230,000	44,390

TUNIS.

Items reported for 1895.	Francs.	Value in United States money.
Gold coinage	1,200	$231.60
Silver coinage	1,800	347.40

TURKEY.

Items reported for 1895.	Piasters.	Value in United States money.
Gold recoinage (domestic)	10,000.00	$43,960.00
Gold recoinage (foreign)	768,142.86	3,376,756.00
Silver recoinage	9,868,638.00	414,482.80

URUGUAY.

Items reported for 1895.	Fine ounces.	Value in United States money.
Silver coinage	.....	$1,000,000
Gold produced	1,316	27,200

MONETARY STATISTICS OF FOREIGN COUNTRIES.

The statistics of the production and coinage of the precious metals, imports and exports of gold and silver, amount of bank and government notes, both covered and uncovered, of the different foreign countries, published annually in the reports of this Bureau, are obtained directly from the governments of such countries by the representatives of the United States accredited to them.

My grateful acknowledgments are due to the officers and employees of the various mints and assay offices, as well as to the clerical staff of the Bureau, for the fidelity and zeal they display in performing the duties assigned them.

Respectfully, yours,

R. E. PRESTON,
Director of the Mint.

Hon. J. G. CARLISLE,
Secretary of the Treasury.

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I.—Deposits and Purchases of Gold and Silver, by

Description of deposits.	Coinage Mints.			
	Philadelphia.	San Francisco.	Carson.	New Orleans.
GOLD.	*Standard ozs.*	*Standard ozs.*	*Standard ozs.*	*Standard ozs.*
Domestic bullion, unrefined	15,009.637	229,672.226	25,765.424	369.038
Domestic bullion, refinery bars	272.474			
Domestic bullion, refined	25,938.011	901,830.324		
Total domestic bullion	41,220.122	1,131,502.550	25,765.424	369.038
Domestic coin, Treasury transfers	44,013.190			
Domestic coin, mutilated and abraded	15,732.455	497.714		795.125
Foreign bullion, unrefined	4,229.119	19,356.782		6,388.847
Foreign bullion, refined	21.142			
Foreign coin	68.036	5,081.907		267.714
Jewelers' bars, old plate, etc	42,449.519	1,390.053		3,528.522
Total deposits	147,733.583	1,158,429.006	25,765.424	11,349.246
Redeposits:				
Fine bars	1,083,525.492			
Unparted bars	421,690.864	24,231.563		
Total gold received	1,652,949.939	1,182,660.569	25,765.424	11,349.246
SILVER.				
Domestic bullion, unrefined	952.46	40,003.13	49,380.49	113.31
Domestic bullion, refinery bars				
Domestic bullion, refined				
Total domestic bullion	952.46	40,003.13	49,380.49	113.31
Domestic coin, Treasury transfers	1,811,542.35	563,931.91		1,142,747.20
Domestic coin, mutilated	1,435.99	144.70		780.33
Trade dollars	157.92			5.17
Foreign bullion, unrefined	545.74	6,553.28		1,051.07
Foreign bullion, refined				
Foreign coin				3.56
Jewelers' bars, old plate, etc	69,501.02	463.00		2,993.27
Total deposits	1,884,135.48	611,096.02	49,380.49	1,147,693.91
Redeposits:				
Fine bars	14,447.85			
Unparted bars	111,876.14	15,107.66		
Total silver received	2,010,459.47	626,203.68	49,380.49	1,147,693.91
Gold and silver deposits and purchases	2,031,869.063	1,769,525.026	75,145.914	1,159,043.156
Redeposits:				
Gold	1,505,216.356	24,231.563		
Silver	126,323.99	15,107.66		
Total gold and silver received	3,663,409.409	1,808,864.249	75,145.914	1,159,043.156

WEIGHT, DURING THE FISCAL YEAR ENDED JUNE 30, 1896.

ASSAY OFFICES.						Total.
New York.	Denver.	Boise.	Helena.	Charlotte.	St. Louis.	
Standard ozs.	*Standard ozs.*	*Standard ozs.*	*Standard ozs.*	*Standard ozs.*	*Standard ozs.*	*Standard ozs.*
264, 249. 137	163, 631. 869	48, 901. 386	116, 177. 991	10, 685. 330	624. 560	875, 086. 598
83, 264. 105	58, 285. 198	.....	.....	3, 745. 875	845. 551	146, 413. 203
944, 729. 110	.....	.....	3, 297. 153	.....	419. 541	1, 876, 214. 139
1, 292, 242. 352	221, 917. 067	48, 901. 386	119, 475. 144	14, 431. 205	1, 889. 652	2, 897, 713. 940
.....	.....	.....	.....	.....	.....	44, 013. 190
28, 260. 596	13. 177	1. 070	.....	.....	449. 471	45, 749. 608
98, 925. 381	256. 970	.....	3, 826. 197	.....	223. 767	133, 207. 063
220, 022. 406	.....	.....	.....	.....	15. 359	220, 058. 907
167, 439. 770	.....	.....	.....	.....	15. 810	173, 473. 237
130, 097. 626	1, 292. 820	.....	101. 373	254. 686	3, 023. 837	182, 138. 486
1, 936, 988. 131	223, 480. 034	48, 902. 456	123, 402. 714	14, 685. 891	5, 617. 896	3, 696, 354. 381
311, 660. 720	.....	.....	.....	.....	.....	1, 395, 186 212
137. 147	563. 693	12, 606. 150	2, 185. 110	.....	17. 890	461, 432. 417
2, 248, 785. 998	224, 043. 727	61, 508. 606	125, 587. 824	14, 685. 891	5, 635. 786	5, 552, 973. 010
254, 249. 33	47, 620. 74	16, 015. 91	41, 266. 28	1, 054. 65	76. 35	450, 732. 65
22, 114. 27	1, 051. 29	.....	.....	7. 75	. 60	23, 173. 91
4, 438, 056. 45	.....	.....	.....	.....	3. 34	4, 438, 059. 79
4, 714, 420. 05	48, 672. 03	16, 015. 91	41, 266. 28	1, 062. 40	80. 29	4, 911, 966. 35
.....	.....	.....	.....	.....	.....	3, 518, 221. 46
2, 294. 14	.....	.....	.....	.....	.....	4, 655. 16
36. 09	.....	.....	.....	.....	.....	199. 18
742, 836. 54	29. 95	.....	1, 872. 01	.....	31. 60	752, 920. 19
3, 476. 68	.....	.....	.....	.....	.....	3, 476. 68
167, 709. 65	.....	.....	.....	.....	.....	167, 713. 21
597, 040. 03	377. 63	.....	25. 45	92. 26	1, 046. 99	671, 539. 65
6, 227, 813. 18	49, 079. 61	16. 015. 91	43, 163. 74	1, 154. 66	1, 158. 88	10, 030, 691. 88
4, 644. 78	.....	.....	.....	.....	.....	19, 092. 63
1, 507. 32	530. 44	2, 809. 16	853. 38	.....	3. 64	132, 687. 74
6, 233, 965. 28	49, 610. 05	18, 825. 07	44, 017. 12	1, 154. 66	1, 162. 52	10, 182, 472. 25
8, 164, 801. 311	272, 559. 644	64, 918. 366	166, 566. 454	15, 840. 551	6, 776. 776	13, 727, 046. 261
311, 797. 867	563. 693	12, 606. 150	2, 185. 110	.....	17. 890	1, 856, 618. 629
6, 152. 10	530. 44	2, 809. 16	853. 38	.....	3. 64	151, 780. 37
8, 482, 751. 278	273, 653. 777	80, 333. 676	169, 604. 944	15, 840. 551	6, 798. 306	15, 735, 445. 260

II.—DEPOSITS AND PURCHASES OF GOLD AND SILVER, BY

Description of deposits.	COINAGE MINTS.			
	Philadelphia.	San Francisco.	Carson.	New Orleans.
GOLD.				
Domestic bullion, unrefined	$279,249.06	$4,272,971.65	$479,356.73	$6,865.82
Domestic bullion, refinery bars	5,069.28			
Domestic bullion, refined	482,567.65	16,778,238.59		
Total domestic bullion	766,885.99	21,051,210.24	479,356.73	6,865.82
Domestic coin, Treasury transfers	818,850.04			
Domestic coin, mutilated and abraded	292,696.84	9,259.79		14,793.02
Foreign bullion, unrefined	78,681.28	360,126.17		118,862.27
Foreign bullion, refined	393.34			
Foreign coin	1,265.79	105,709.90		4,980.73
Jewelers' bars, old plate, etc	789,758.49	25,861.45		65,646.92
Total deposits	2,748,531.77	21,552,167.55	479,356.73	211,148.76
Redeposits:				
Fine bars	20,158,613.81			
Unparted bars	7,845,411.42	450,819.78		
Total gold received	30,752,557.00	22,002,987.33	479,356.73	211,148.76
SILVER.				
Domestic bullion, unrefined	1,108.32	46,549.10	57,460.93	131.85
Domestic bullion, refinery bars				
Domestic bullion, refined				
Total domestic bullion	1,108.32	46,549.10	57,460.93	131.85
Domestic coin, Treasury transfers	2,107,976.55	656,211.68		1,329,742.20
Domestic coin, mutilated	1,670.97	168.38		908.02
Trade dollars	183.76			6.02
Foreign bullion, unrefined	635.04	7,625.63		1,223.06
Foreign bullion, refined				
Foreign coin				4.14
Jewelers' bars, old plate, etc	80,873.92	538.76		3,483.08
Total deposits	2,192,448.56	711,093.55	57,460.93	1,335,498.37
Redeposits:				
Fine bars	16,812.04			
Unparted bars	130,183.15	17,579.82		
Total silver received	2,339,443.75	728,673.37	57,460.93	1,335,498.37
Gold and silver deposits and purchases	4,940,980.33	22,263,261.10	536,817.66	1,546,647.13
Redeposits:				
Gold	28,004,025.23	450,819.78		
Silver	146,995.19	17,579.82		
Total gold and silver received	33,092,000.75	22,731,660.70	536,817.66	1,546,647.13

VALUE, DURING THE FISCAL YEAR ENDED JUNE 30, 1896.

ASSAY OFFICES.						Total.
New York.	Denver.	Boise.	Helena.	Charlotte.	St. Louis.	
$4,916,263.01	$3,044,313.84	$909,793.23	$2,161,450.98	$257,452.71	$11,619.72	$16,339,336.75
1,549,099.63	1,084,375.78	.....	.....	11,034.83	15,731.18	2,665,310.70
17,576,355.54	.....	.....	61,342.38	.....	7,805.41	34,906,309.57
24,041,718.18	4,128,689.62	909,793.23	2,222,793.36	268,487.54	35,156.31	53,910,957.02
.....	.....	.....	.....	.....	.....	818,850.04
525,778.53	245.15	19.91	.....	.....	8,362.25	851,155.49
1,840,472.20	4,780.84	.....	71,185.06	.....	4,163.11	2,478,270.93
4,093,440.12	.....	.....	.....	.....	285.75	4,094,119.21
3,115,158.50	.....	.....	.....	.....	294.14	3,227,409.06
2,420,420.95	24,052.47	.....	1,886.01	4,738.34	56,257.43	3,388,622.06
36,036,988.48	4,157,768.08	909,813.14	2,295,864.43	273,225.88	104,518.99	68,769,383.81
5,798,338.97	.....	.....	.....	.....	.....	25,956,952.78
2,551.57	10,487.31	234,533.01	40,653.21	.....	332.84	8,584,789.14
41,837,879.02	4,168,255.39	1,144,346.15	2,336,517.64	273,225.88	104,851.83	103,311,125.73
295,853.76	55,413.21	18,636.69	48,018.94	1,227.23	88.84	524,488.87
25,732.97	1,223.32	.....	.....	9.02	.70	26,966.01
5,164,283.87	.....	.....	.....	.....	3.89	5,164,287.76
5,485,870.60	56,636.53	18,636.69	48,018.94	1,236.25	93.43	5,715,742.64
.....	.....	.....	.....	.....	.....	4,093,930.43
2,669.54	.....	.....	.....	.....	.....	5,416.91
41.99	.....	.....	.....	.....	.....	231.77
864,391.61	34.85	.....	2,178.34	.....	36.77	876,125.30
4,045.59	.....	.....	.....	.....	.....	4,045.59
195,153.05	.....	.....	.....	.....	.....	195,157.19
694,737.50	439.42	.....	29.61	107.35	1,218.32	781,427.96
7,246,909.88	57,110.80	18,636.69	50,226.89	1,343.60	1,348.52	11,672,077.79
5,404.84	.....	.....	.....	.....	.....	22,216.88
1,753.97	617.22	3,268.84	993.02	.....	4.23	154,400.25
7,254,068.69	57,728.02	21,905.53	51,219.91	1,343.60	1,352.75	11,848,694.92
43,283,898.36	4,214,878.88	928,449.83	2,346,091.32	274,569.48	105,867.51	80,441,461.60
5,800,890.54	10,487.31	234,533.01	40,653.21	.....	332.84	34,541,741.92
7,158.81	617.22	3,268.84	993.02	.....	4.23	176,617.13
49,091,947.71	4,225,983.41	1,166,251.68	2,387,737.55	274,569.48	106,204.58	115,159,820.65

III.—DEPOSITS OF UNREFINED GOLD OF DOMESTIC PRODUCTION, WITH THE STATES NOT DISTRIBUTED, BY WEIGHT, DURING

	Source.	COINAGE MINTS.			
		Philadelphia.	San Francisco.	Carson.	New Orleans.
		Standard ozs.	*Standard ozs.*	*Standard ozs.*	*Standard ozs.*
1	Alabama				183.534
2	Alaska	77.070	13,144.760		
3	Arizona	199.209	34,043.852		
4	California	169.172	159,670.789	6,917.840	
5	Colorado	6,997.904	6.151		63.027
6	Georgia	1,211.503			
7	Idaho	22.019	4,719.359		
8	Michigan	60.486			
9	Minnesota	32.132			
10	Montana	25.830	248.618		
11	Nebraska	22.493			
12	Nevada		5,267.378	18,730.427	
13	New Mexico	24.997	105.841		116.072
14	North Carolina	186.528			
15	Oregon	24.182	6,863.886	117.157	
16	South Carolina	324.581			
17	South Dakota	4,468.219			
18	Tennessee	17.613			
19	Texas				6.405
20	Utah		1,858.670		
21	Vermont	43.206			
22	Virginia	230.558			
23	Washington	14.256	3,727.015		
24	Wyoming	69.385			
25	Other States	788.294	15.907		
	Total unrefined	15,009.637	229,672.226	25,765.424	369.038
	Refinery bars (fineness less than 0.992)	272.474			
	Grand total unrefined	15,282.111	229,672.226	25,765.424	369.038

AND TERRITORIES PRODUCING THE SAME, AND OF REFINED DOMESTIC BULLION THE FISCAL YEAR ENDED JUNE 30, 1896.

ASSAY OFFICES.						Total.	
New York.	Denver.	Boise.	Helena.	Charlotte.	St. Louis.		
Stand. ozs.	*Standard ozs.*	*Standard ozs.*	*Standard ozs.*	*Standard ozs.*	*Standard ozs.*	*Standard ozs.*	
1.409	.....	.....	.....	17.353	.....	202.296	1
34.903	8.809	.....	2,887.182	.....	.....	16,152.724	2
3,495.388	2,378.810	.....	.....	.....	18.020	40,135.279	3
243.966	28.029	.....	.....	.....	41.176	167,070.972	4
20,759.057	147,184.607	.....	8.475	.....	266.576	175,285.797	5
109.197	.....	.....	.....	5,149.141	.....	6,469.841	6
3,539.625	725.728	30,109.219	18,146.052	.....	79.924	57,341.926	7
1,625.227	.....	.....	.....	.....	.....	1,685.713	8
.....	.....	.....	.....	.....	.....	32.132	9
14,360.859	145.616	.....	89,667.698	.....	37.799	104,486.420	10
.....	.....	.....	.....	.....	.....	22.493	11
44,672.579	61.414	.....	.....	.....	.....	68,731.798	12
3,646.298	7,148.615	.....	.....	.....	181.065	11,222.888	13
295.082	.....	.....	.....	2,307.396	.....	2,789.006	14
11.961	127.562	18,748.721	713.123	.....	.....	26,606.592	15
.....	.....	.....	.....	3,211.440	.....	3,536.021	16
159,121.543	2,470.578	.....	25.011	.....	.....	166,085.351	17
6.152	.....	.....	.....	.....	.....	23.765	18
.....	.....	.....	.....	.....	.....	6.405	19
4,260.916	2,371.336	.....	.....	.....	.....	8,490.922	20
.....	.....	.....	.....	.....	.....	43.206	21
6.400	.....	.....	.....	.....	.....	236.958	22
.....	5.746	43.446	4,722.301	.....	.....	8,512.764	23
30.962	975.019	.....	8.149	.....	.....	1,083.515	24
8,027.613	.....	.....	.....	.....	.....	8,831.814	25
264,249.137	163,631.869	48,901.386	116,177.991	10,685.330	624.560	875,086.598	
83,264.105	58,285.198	.....	.....	3,745.875	845.551	146,413.203	
347,513.242	221,917.067	48,901.386	116,177.991	14,431.205	1,470.111	1,021,499.801	

IV.—DEPOSITS OF UNREFINED GOLD OF DOMESTIC PRODUCTION, WITH THE STATES NOT DISTRIBUTED, BY VALUE, DURING

	Source.	COINAGE MINTS.			
		Philadelphia.	San Francisco.	Carson.	New Orleans.
1	Alabama				$3,414.58
2	Alaska	$1,433.86	$244,553.67		
3	Arizona	3,706.21	633,373.99		
4	California	3,147.39	2,970,619.33	$128,704.00	
5	Colorado	130,193.56	114.44		1,172.60
6	Georgia	22,539.59			
7	Idaho	409.66	87,802.03		
8	Michigan	1,125.32			
9	Minnesota	597.80			
10	Montana	480.56	4,625.45		
11	Nebraska	418.47			
12	Nevada		97,997.73	348,473.06	
13	New Mexico	465.06	1,969.14		2,159.48
14	North Carolina	3,470.29			
15	Oregon	449.90	127,700.21	2,179.67	
16	South Carolina	6,038.72			
17	South Dakota	83,129.65			
18	Tennessee	327.69			
19	Texas				119.16
20	Utah		34,579.91		
21	Vermont	803.83			
22	Virginia	4,289.45			
23	Washington	265.23	69,339.81		
24	Wyoming	1,290.88			
25	Other States	14,665.94	295.94		
	Total unrefined	279,249.06	4,272,971.65	479,356.73	6,865.82
	Refinery bars (fineness less than 0.992)	5,069.28			
	Grand total unrefined	284,318.34	4,272,971.65	479,356.73	6,865.82

AND TERRITORIES PRODUCING THE SAME, AND OF REFINED DOMESTIC PRODUCTION THE FISCAL YEAR ENDED JUNE 30, 1896.

ASSAY OFFICES.						Total.	
New York.	Denver.	Boise.	Helena.	Charlotte.	St. Louis.		
$26.21	.....	.....	.....	$322.85	.....	$3,763.64	1
649.36	$163.89	.....	$53,715.01	.....	.....	300,515.79	2
65,030.47	44,256.93	.....	.....	.....	$335.26	746,702.86	3
4,538.90	521.47	.....	.....	.....	766.06	3,108,297.15	4
386,215.01	2,738,318.27	.....	157.67	.....	4,959.55	3,261,131.10	5
2,031.57	.....	.....	.....	102,844.95	.....	127,416.11	6
65,853.49	13,501.91	$560,171.52	337,600.97	.....	1,486.96	1,066,826.54	7
30,236.78	.....	.....	.....	.....	.....	31,362.10	8
.....	.....	.....	.....	.....	.....	597.80	9
267,178.78	2,709.13	.....	1,668,236.24	.....	703.24	1,943,933.40	10
.....	.....	.....	.....	.....	.....	418.47	11
831,117.75	1,142.59	.....	.....	.....	.....	1,278,731.13	12
67,838.10	132,997.49	.....	.....	.....	3,368.65	208,797.92	13
5,489.90	.....	.....	.....	43,255.53	.....	52,215.72	14
222.53	2,373.25	348,813.41	13,267.40	.....	.....	495,006.37	15
.....	.....	.....	.....	111,029.38	.....	117,068.10	16
2,960,400.80	45,964.24	.....	465.32	.....	.....	3,089,960.01	17
114.46	.....	.....	.....	.....	.....	442.15	18
.....	.....	.....	.....	.....	.....	119.16	19
79,272.85	44,117.88	.....	.....	.....	.....	157,970.64	20
.....	.....	.....	.....	.....	.....	803.83	21
119.07	.....	.....	.....	.....	.....	4,408.52	22
.....	106.90	808.30	87,856.76	.....	.....	158,377.00	23
576.04	18,139.89	.....	151.61	.....	.....	20,158.42	24
149,350.94	.....	.....	.....	.....	.....	164,312.82	25
4,916,263.01	3,044,313.84	909,793.23	2,161,450.98	257,452.71	11,619.72	16,339,336.75	
1,549,099.63	1,084,375.78	.....	.....	11,034.83	15,731.18	2,665,310.70	
6,465,362.64	4,128,689.62	909,793.23	2,161,450.98	268,487.54	27,350.90	19,004,647.45	

V.—DEPOSITS OF UNREFINED SILVER OF DOMESTIC PRODUCTION, WITH THE STATES DISTRIBUTED, BY WEIGHT, DURING THE

	Source.	COINAGE MINTS.			
		Philadelphia.	San Francisco.	Carson.	New Orleans.
		Standard ozs.	*Standard ozs.*	*Standard ozs.*	*Standard ozs.*
1	Alabama				41.65
2	Alaska	15.13	2,437.90		
3	Arizona	36.59	8,715.23		
4	California	52.53	24,104.24	5,732.88	
5	Colorado	197 57	2.77		23.81
6	Georgia	42.64			
7	Idaho	1.68	1,227.23		
8	Michigan	162.68			
9	Minnesota	6.32			
10	Montana	19.97	135.30		
11	Nevada		1,340.70	43,613.24	
12	New Mexico	5.00	50.15		47.85
13	North Carolina	37.59			
14	Oregon	3.33	1,122.54	34.37	
15	South Carolina	81.46			
16	South Dakota	104.78			
17	Tennessee	.95			
18	Utah		233.05		
19	Vermont	5.66			
20	Virginia	16.73			
21	Washington	3.73	630.85		
22	Wyoming	6.05			
23	Other States	152.07	3.17		
	Total unrefined	952.46	40,003.13	49,380.49	113.31
	Refinery bars (fineness less than 0.992)				
	Grand total unrefined	952.46	40,003.13	49,380.49	113.31

AND TERRITORIES PRODUCING THE SAME, AND OF REFINED DOMESTIC BULLION NOT FISCAL YEAR ENDED JUNE 30, 1896.

ASSAY OFFICES.						Total.	
New York.	Denver.	Boise.	Helena.	Charlotte.	St. Louis.		
Standard ozs.	*Standard ozs.*	*Standard ozs.*	*Standard ozs.*	*Standard ozs.*	*Standard ozs.*	*Standard ozs.*	
0.01	.....	.....	.....	.....	.....	41.66	1
5.57	1.82	.....	528.71	.....	.....	2,989.13	2
1,404.89	646.39	.....	.....	.....	3.67	10,806.77	3
47.02	2.29	.....	.....	.....	4.49	29,943.45	4
19,031.82	45,341.38	.....	.62	.....	28.04	64,626.01	5
15.24	.....	.....	.....	323.01	.....	380.89	6
905.75	75.25	11,750.80	3,630.45	.....	18.63	17,609.79	7
41,774.36	.....	.....	.....	.....	.....	41,937.04	8
.....	.....	.....	.....	.....	.....	6.32	9
68,023.06	19.58	.....	35,684.34	.....	8.53	103,890.78	10
25,051.84	47.77	.....	.....	.....	.....	70,053.55	11
11,686.67	916.25	.....	.....	.....	12.99	12,718.91	12
34.01	.....	.....	.....	436.89	.....	508.49	13
.....	21.41	4,257.09	175.39	.....	.....	5,614.13	14
.....	.....	.....	.....	294.75	.....	376.21	15
35,255.33	273.00	.....	2.66	.....	.....	35,635.77	16
.34	.....	.....	.....	.....	.....	1.29	17
6,374.82	143.56	.....	.....	.....	.....	6,751.43	18
.....	.....	.....	.....	.....	.....	5.66	19
1.18	.....	.....	.....	.....	.....	17.91	20
.....	.95	8.02	1,243.65	.....	.....	1,887.20	21
1.82	131.09	.....	.46	.....	.....	139.42	22
44,635.60	.....	.....	.....	.....	.....	44,790.84	23
254,249.33	47,620.74	16,015.91	41,266.28	1,054.65	76.35	450,732.65	
22,114.27	1,051.29	.....	.....	7.75	.60	23,173.91	
276,363.60	48,672.03	16,015.91	41,266.28	1,062.40	76.95	473,906.56	

VI.—DEPOSITS OF UNREFINED SILVER OF DOMESTIC PRODUCTION, WITH THE BULLION NOT DISTRIBUTED, BY VALUE, DURING

	Source.	COINAGE MINTS.			
		Philadelphia.	San Francisco.	Carson.	New Orleans.
1	Alabama				$48.46
2	Alaska	$17.61	$2,836.83		
3	Arizona	42.58	10,141.36		
4	California	61.12	28,048.57	$6,670.99	
5	Colorado	229.90	3.22		27.71
6	Georgia	49.62			
7	Idaho	1.95	1,428.05		
8	Michigan	189.30			
9	Minnesota	7.35			
10	Montana	23.24	157.44		
11	Nevada		1,560.09	50,749.95	
12	New Mexico	5.82	58.36		55.68
13	North Carolina	43.74			
14	Oregon	3.87	1,306.23	39.99	
15	South Carolina	94.79			
16	South Dakota	121.93			
17	Tennessee	1.11			
18	Utah		271.18		
19	Vermont	6.59			
20	Virginia	19.47			
21	Washington	4.34	734.08		
22	Wyoming	7.04			
23	Other States	176.95	3.69		
	Total unrefined	1,108.32	46,549.10	57,460.93	131.85
	Refinery bars (fineness less than 0.992)				
	Grand total unrefined	1,108.32	46,549.10	57,460.93	131.85

STATES AND TERRITORIES PRODUCING THE SAME, AND OF REFINED DOMESTIC THE FISCAL YEAR ENDED JUNE 30, 1896.

ASSAY OFFICES.						Total.	
New York.	Denver.	Boise.	Helena.	Charlotte.	St. Louis.		
$0.01	.....	.....	.....	.....	.....	$48.47	1
6.48	$2.12	.....	$615.23	.....	.....	3,478.27	2
1,634.79	752.16	.....	.....	.....	$4.27	12,575.16	3
54.72	2.67	.....	.....	.....	5.22	34,843.29	4
22,146.12	52,760.87	.....	.72	.....	32.63	75,200.17	5
17.73	.....	.....	.....	$375.87	.....	443.22	6
1,053.96	87.56	$13,673.66	4,224.52	.....	21.68	20,491.38	7
48,610.16	.....	.....	.....	.....	.....	48,799.46	8
.....	.....	.....	.....	.....	.....	7.35	9
79,154.11	22.78	.....	41,523.59	.....	9.92	120,891.08	10
29,151.23	55.59	.....	.....	.....	.....	81,516.86	11
13,599.03	1,066.18	.....	.....	.....	15.12	14,801.19	12
39.58	.....	.....	.....	508.38	.....	591.70	13
.....	24.91	4,953.70	204.09	.....	.....	6,532.79	14
.....	.....	.....	.....	342.98	.....	437.77	15
41,024.38	317.67	.....	3.10	.....	.....	41,467.08	16
.39	.....	.....	.....	.....	.....	1.50	17
7,417.97	167.05	.....	.....	.....	.....	7,856.20	18
.....	.....	.....	.....	.....	.....	6.59	19
1.37	.....	.....	.....	.....	.....	20.84	20
.....	1.11	9.33	1,447.16	.....	.....	2,196.02	21
2.12	152.54	.....	.53	.....	.....	162.23	22
51,939.61	.....	.....	.....	.....	.....	52,120.25	23
295,853.76	55,413.21	18,636.69	48,018.94	1,227.23	88.84	524,488.87	
25,732.97	1,223.32	.....	.....	9.02	.70	26,966.01	
321,586.73	56,636.53	18,636.69	48,018.94	1,236.25	89.54	551,454.88	

VII.—BARS MANUFACTURED OF GOLD AND SILVER, BY

Description.	COINAGE MINTS.			
	Philadelphia.	San Francisco.	Carson.	New Orleans.
GOLD.	*Standard ozs.*	*Standard ozs.*	*Standard ozs.*	*Standard ozs.*
Fine bars	60,257.839			8.617
Mint bars				
Standard bars	95,377.780			
Unparted bars				
Total gold	155,635.619			8.617
SILVER.				
Fine bars	52,388.17		47,965.56	1,578.60
Mint bars				
Standard bars				
Unparted bars				
Total silver	52,388.17		47,965.56	1,578.60

VIII.—BARS MANUFACTURED OF GOLD AND SILVER, BY

Description.	COINAGE MINTS.			
	Philadelphia.	San Francisco.	Carson.	New Orleans.
GOLD.				
Fine bars	$1,121,076.07			$160.32
Mint bars				
Standard bars	1,774,470.33			
Unparted bars				
Total gold	2,895,546.40			160.32
SILVER.				
Fine bars	60,960.78		$55,814.46	1,836.92
Mint bars				
Standard bars				
Unparted bars				
Total silver	60,960.78		55,814.46	1,836.92
Total gold and silver bars	2,956,507.18		55,814.46	1,997.24

WEIGHT, DURING THE FISCAL YEAR ENDED JUNE 30, 1896.

ASSAY OFFICES.						Total.
New York.	Denver.	Boise.	Helena.	Charlotte.	St. Louis.	
Standard ozs.	*Standard ozs.*	*Standard ozs.*	*Standard ozs.*	*Standard ozs.*	*Standard ozs.*	*Standard ozs.*
2,017,299.469	.....	.....	.....	.....	.....	2,077,565.925
176,827.057	.....	.....	.....	.....	.....	176,827.057
80,875.560	.....	.....	.....	.....	.....	176,253.340
.....	224,043.727	61,508.606	125,587.824	14,685.891	5,635.786	431,461.834
2,275,002.086	224,043.727	61,508.606	125,587.824	14,685.891	5,635.786	2,862,108.156
6,117,282.98	.....	.....	.....	.....	.....	6,219,215.31
.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....
.....	49,610.05	18,825.07	44,017.12	1,154.66	1,162.52	114,769.42
6,117,282.98	49,610.05	18,825.07	44,017.12	1,154.66	1,162.52	6,333,984.73

VALUE, DURING THE FISCAL YEAR ENDED JUNE 30, 1896.

ASSAY OFFICES.						Total.
New York.	Denver.	Boise.	Helena.	Charlotte.	St. Louis.	
$37,531,152.90	.....	.....	.....	.....	.....	$38,652,389.29
3,289,805.70	.....	.....	.....	.....	.....	3,289,805.70
1,504,661.58	.....	.....	.....	.....	.....	3,279,131.91
.....	$4,168,255.39	$1,144,346.15	$2,336,517.64	$273,225.88	$104,851.83	8,027,196.89
42,325,620.18	4,168,255.39	1,144,346.15	2,336,517.64	273,225.88	104,851.83	53,248,523.79
7,118,292.92	.....	.....	.....	.....	.....	7,236,905.08
.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....
.....	57,728.02	21,905.53	51,219.91	1,343.60	1,352.75	133,549.81
7,118,292.92	57,728.02	21,905.53	51,219.91	1,343.60	1,352.75	7,370,454.89
49,443,913.10	4,225,983.41	1,166,251.68	2,387,737.55	274,569.48	106,204.58	60,618,978.68

IX.—STATEMENT OF DOMESTIC MUTILATED AND UNCURRENT GOLD AND SILVER FOR RECOINAGE, SHOWING WEIGHT, FACE VALUE, COINING VALUE,

Denominations.	PHILADELPHIA.		SAN FRANCISCO.		NEW ORLEANS.	
	Received from Treasury.	Purchased.	Received from Treasury.	Purchased.	Received from Treasury.	Purchased.
GOLD.						
Double eagle	$254,960.00	$100,860.00	.....	$6,700.00	.....	$5,280.00
Eagles	195,480.00	79,420.00	.....	1,110.00	.....	2,110.00
Half eagles	365,760.00	104,440.00	.....	1,995.00	.....	7,090.00
Three-dollar pieces	12.00	87.00	.....	12.00	.....	3.00
Quarter eagles	9,360.00	8,940.00	.....	102.50	.....	452.50
Dollars	11.00	365.00	.....	28.00	.....	7.00
Total gold, face value.	825,583.00	294,112.00	.....	9,947.50	.....	14,942.50
SILVER.						
Trade dollars	.....	183.00	.....	.....	.....	6.00
Standard dollars	1,100.00	481.00	.....	.....	.....	289.00
Half dollars	610,512.00	581.00	$539,000.00	86.50	$778,475.00	401.00
Quarter dollars	1,180,932.50	453.25	154,000.00	51.75	576,030.00	149.50
Twenty-cent pieces	310.40	.40	15.80	.40	71.60	6.20
Dimes	602,954.20	257.00	34,000.00	51.60	144,839.90	120.40
Half dimes	3,704.05	33.20	228.05	4.70	453.50	16.45
Three-cent pieces	484.46	2.70	.....	.03	30.00	.....
Total silver, face value	2,399,997.61	1,991.55	727,243.85	194.98	1,499,900.00	988.55
SUMMARY.	*Stand. ozs.*	*Stand. ozs.*	*Stand. ozs.*	*Stand. ozs.*	*Stand. ozs.*	*Stand. ozs.*
Gold coin	44,013.190	15,732.455	.....	497.714	.....	795.125
Silver coin	1,811,542.35	1,593.91	563,931.91	144.70	1,142,747.20	785.50
Gold, coining value	$818,850.04	$292,696.84	.....	$9,259.79	.....	$14,793.02
Silver, subsidiary coining value	2,253,862.95	1,983.09	$701,626.00	180.03	$1,421,769.45	977.29
Silver dollar, coining value	2,107,976.55	1,670.97	656,211.68	168.38	1,329,742.20	908.02
Loss, gold	$6,732.96	$1,415.16	.....	$687.71	.....	$149.48
Loss, silver, subsidiary	146,134.66	8.46	$25,617.85	14.95	$78,130.55	11.26

Gold coins.	Face value.	Fine ounces.	Coining value.
Received from Treasury on transfer orders	$825,583.00	39,611.871	$818,850.04
Received over the counter	858,297.50	41,174.648	851,155.49
Total	1,683,880.50	80,786.519	1,670,005.53

COINS TRANSFERRED FROM THE TREASURY AND PURCHASED OVER THE COUNTER AND LOSS DURING THE FISCAL YEAR ENDED JUNE 30, 1896.

NEW YORK.	DENVER.	BOISE.	ST. LOUIS.	TOTAL.		
Purchased.	Purchased.	Purchased.	Purchased.	Received from Treasury.	Purchased.	Received from Treasury and purchased.
$152,740.00	$180.00	$20.00	$6,140.00	$254,960.00	$271,920.00	$526,880.00
197,290.00	40.00	.....	380.00	195,480.00	280,350.00	475,830.00
171,515.00	25.00	.....	1,855.00	365,760.00	286,920.00	652,680.00
150.00	3.00	.....	3.00	12.00	258.00	270.00
8,585.00	5.00	.....	57.50	9,360.00	18,142.50	27,502.50
295.00	1.00	.....	11.00	11.00	707.00	718.00
530,575.00	254.00	20.00	8,446.50	825,583.00	858,297.50	1,683,880.50
47.00	.....	.....	.....	.....	236.00	236.00
164.00	.....	.....	.....	1,100.00	934.00	2,034.00
354.50	.....	.....	.....	1,927,987.00	1,423.00	1,929,410.00
331.50	.....	.....	.....	1,910,962.50	986.00	1,911,948.50
.....	.....	.....	.....	397.80	7.00	404.80
2,348.50	.....	.....	.....	781,794.10	2,777.50	784,571.60
.....	.....	.....	.....	4,385.60	54.35	4,439.95
.....	.....	.....	.....	514.46	2.73	517.19
3,245.50	.....	.....	.....	4,627,141.46	6,420.58	4,633,562.04
Stand. ozs.	*Stand. ozs.*	*Stand. ozs.*	*Stand. ozs.*	*Stand. ozs.*	*Stand. ozs.*	*Stand. ozs.*
28,260.596	13.177	1.070	449.471	44,013.190	45,749.608	89,762.798
2.330.23	.....	.....	.....	3,518,221.46	4,854.34	3,523,075.80
$525,778.53	$245.15	$19.91	$8,362.25	$818,850.04	$851,155.49	$1,670,005.53
2,899.20	.....	.....	.....	4,377,258.40	6,039.61	4,383,298.01
2,669.54	.....	.....	.....	4,093,930.43	5,416.91	4,099,347.34
$4,796.47	$8.85	$0.09	$84.25	$6,732.96	$7,142.01	$13,874.97
346.30	.....	.....	.....	249,883.06	380.97	250,264.03

Silver coins.	Face value.	Fine ounces.	Subsidiary coining value.
Received from Treasury on transfer orders	$4,627,141.46	3,166,399.32	$4,377,258.40
Received over the counter	6,420.58	4,368.91	6,039.61
Total	4,633,562.04	3,170,768.23	4,383,298.01

X.—Quantity and Cost of Silver Used in the Coinage of Silver Dollars during the Fiscal Year 1896, under Act of July 14, 1890.

MINT AT PHILADELPHIA.

Month.	COINED.		TOTAL EMPLOYMENT.		Dollars coined.	Seigniorage.
	Standard ounces.	Cost.	Standard ounces.	Cost.		
1895.						
July						
August						
September	77.34	$63.00	77.34	$63.00	90	$27.00
October						
November						
December	275.00	224.02	275.00	224.02	320	95.98
1896.						
January						
February	773,437.50	630,051.71	773,437.50	630,051.71	900,000	269,948.29
March	773,684.14	630,252.62	773,684.14	630,252.62	900,287	270,034.38
April	773,437.50	630,051.71	773,437.50	630,051.71	900,000	269,948.29
May	773,437.50	630,051.71	773,437.50	630,051.71	900,000	269,948.29
June	773,544.92	630,139.21	773,544.92	630,139.21	900,125	269,985.79
Total	3,867,893.90	3,150,833.98	3,867,893.90	3,150,833.98	4,500,822	1,349,988.02

MINT AT SAN FRANCISCO.

1895.						
July						
August						
September						
October						
November						
December						
1896.						
January						
February	85,937.50	$69,258.31	85,937.50	$69,258.31	100,000	$30,741.69
March	85,937.50	69,258.31	85,937.50	69,258.31	100,000	30,741.69
April	214,843.75	173,145.79	214,843.75	173,145.79	250,000	76,854.21
May	257,812.50	207,768.28	257,812.50	207,768.28	300,000	92,231.72
June	257,812.50	207,768.28	257,812.50	207,768.28	300,000	92,231.72
Total	902,343.75	727,198.97	902,343.75	727,198.97	1,050,000	322,801.03

X.—QUANTITY AND COST OF SILVER USED IN THE COINAGE OF SILVER DOLLARS DURING THE FISCAL YEAR 1896, UNDER ACT OF JULY 14, 1890—Continued.

MINT AT NEW ORLEANS.

Month.	COINED.		TOTAL EMPLOYMENT.		Dollars coined.	Seigniorage.
	Standard ounces.	Cost.	Standard ounces.	Cost.		
1895.						
July						
August						
September						
October						
November						
December						
1896.						
January						
February	429,687.50	$332,064.64	429,687.50	$332,064.64	500,000	$167,935.36
March	429,687.50	332,064.64	429,687.50	332,064.64	500,000	167,935.36
April	300,781.25	232,445.25	300,781.25	232,445.25	350,000	117,554.75
May	257,812.50	199,238.78	257,812.50	199,238.78	300,000	100,761.22
June	257,812.50	199,238.78	257,812.50	199,238.78	300,000	100,761.22
Total	1,675,781.25	1,295,052.09	1,675,781.25	1,295,052.09	1,950,000	654,947.91

RECAPITULATION.

1895.						
July						
August						
September	77.34	$63.00	77.34	$63.00	90	$27.00
October						
November						
December	275.00	224.02	275.00	224.02	320	95.98
1896.						
January						
February	1,289,062.50	1,031,374.66	1,289,062.50	1,031,374.66	1,500,000	468,625.34
March	1,289,309.14	1,031,575.57	1,289,309.14	1,031,575.57	1,500,287	468,711.43
April	1,289,062.50	1,035,642.75	1,289,062.50	1,035,642.75	1,500,000	464,357.25
May	1,289,062.50	1,037,058.77	1,289,062 50	1,037,058.77	1,500,000	462,941.23
June	1,289,169.92	1,037,146.27	1,289,169.92	1,037,146.27	1,500,125	462,978.73
Total	6,446,018.90	5,173,085.04	6,446,018.90	5,173,085.04	7,500,822	2,327,736.96

XI.—Quantity and Cost of Silver Used in the Coinage of Silver Dollars from July 1, 1896, to November 1, 1896, under Act of July 14, 1890.

MINT AT PHILADELPHIA.

Month.	COINED.		TOTAL EMPLOYMENT.		Dollars coined.	Seigniorage.
	Standard ounces.	Cost.	Standard ounces.	Cost.		
1896.						
July	139,218.75	$113,409.31	139,218.75	$113,409.31	162,000	$48,590.69
August	1,117,187.50	910,074.69	1,117,187.50	910,074.69	1,300,000	389,925.31
September	1,117,273.44	910,144.70	1,117,273.44	910,144.70	1,300,100	389,955.30
October	1,031,250.00	840,068.94	1,031,250.00	840,068.94	1,200,000	359,931.06
Total	3,404,929.69	2,773,697.64	3,404,929.69	2,773,697.64	3,962,100	1,188,402.36

MINT AT SAN FRANCISCO.

1896.						
July	515,625.00	$415,536.57	515,625.00	$415,536.57	600,000	$184,463.43
August	644,531.25	519,420.71	644,531.25	519,420.71	750,000	230,579.29
September	687,500.00	554,048.76	687,500.00	554,048.76	800,000	245,951.24
October	472,656.25	380,908.52	472,656.25	380,908.52	550,000	169,091.48
Total	2,320,312.50	1,869,914.56	2,320,312.50	1,869,914.56	2,700,000	830,085.44

MINT AT NEW ORLEANS.

1896.						
July	257,812.50	$199,238.78	257,812.50	$199,238.78	300,000	$100,761.22
August	515,625.00	398,477.57	515,625.00	398,477.57	600,000	201,522.43
September	515,625.00	398,477.57	515,625.00	398,477.57	600,000	201,522.43
October	515,625.00	398,477.57	515,625.00	398,477.57	600,000	201,522.43
Total	1,804,687.50	1,394,671.49	1,804,687.50	1,394,671.49	2,100,000	705,328.51

RECAPITULATION.

1896.						
July	912,656.25	$728,184.66	912,656.25	$728,184.66	1,062,000	$333,815.34
August	2,277,343.75	1,827,972.97	2,277,343.75	1,827,972.97	2,650,000	822,027.03
September	2,320,398.44	1,862,671.03	2,320,398.44	1,862,671.03	2,700,100	837,428.97
October	2,019,531.25	1,619,455.03	2,019,531.25	1,619,455.03	2,350,000	730,544.97
Total	7,529,929.69	6,038,283.69	7,529,929.69	6,038,283.69	8,762,100	2,723,816.31

XII.—AMOUNT, COST, AVERAGE PRICE, AND BULLION VALUE OF THE SILVER DOLLAR OF SILVER PURCHASED UNDER THE ACTS OF FEBRUARY 12, 1873, JANUARY 14, 1875, FEBRUARY 28, 1878, AND JULY 14, 1890.

Acts authorizing.	Fine ounces.	Cost.	Average price per fine ounce.	Bullion value of a silver dollar.
February 12, 1873	5,434,282.00	$7,152,564.00	$1.3162	$1.0180
January 14, 1875	31,603,906.00	37,571,148.00	1.1888	.9194
February 28, 1878	291,272,018.56	308,279,260.71	1.0583	.8185
July 14, 1890	168,674,682.53	155,931,002.25	.9244	.7150
Total	496,984,889.09	508,933,974.96	1.0240	.7920

XIII.—Coinage Executed at the Mints of the United

Denomination.	PHILADELPHIA.	
	Pieces.	Value.
GOLD.		
Double eagles	1,512,548	$30,250,960.00
Eagles	364,749	3,647,490.00
Half eagles	398,928	1,994,640.00
Quarter eagles	11,960	29,900.00
Total gold	2,288,185	35,922,990.00
SILVER.		
Dollars, act July 14, 1890	4,500,822	4,500,822.00
Subsidiary:		
Half dollars	1,893,160	946,580.00
Quarter dollars	5,582,822	1,395,705.50
Dimes	900,822	90,082.20
Total subsidiary	8,376,804	2,432,367.70
Total silver	12,877,626	6,933,189.70
MINOR.		
Five-cent nickel	8,153,062	407,653.10
One-cent bronze	46,168,422	461,684.22
Total minor	54,321,484	869,337.32
Total coinage	69,487,295	43,725,517.02

The mint at Philadelphia coined, in addition to the above silver coinage, 500,000 20-cent pieces ($100,000) for the Government of Ecuador.

Coinage of silver dollars under act of—

February 28, 1878	$378,166,793
July 14, 1890	47,544,776
March 31, 1891	5,078,472
Total	430,790,041

STATES DURING THE FISCAL YEAR ENDED JUNE 30, 1896.

SAN FRANCISCO.		NEW ORLEANS.		TOTAL.	
Pieces.	Value.	Pieces.	Value.	Pieces.	Value.
1,081,175	$21,623,500.00	.....	.....	2,593,723	$51,874,460.00
51,000	510,000.00	.....	.....	415,749	4,157,490.00
164,400	822,000.00	.....	.....	563,328	2,816,640.00
.....	.....	.....	.....	11,960	29,900.00
1,296,575	22,955,500.00	.....	.....	3,584,760	58,878,490.00
1,050,000	1,050,000.00	1,950,000	$1,950,000.00	7,500,822	7,500,822.00
484,903	242,451.50	1,232,000	616,000.00	3,610,063	1,805,031.50
260,000	65,000.00	2,180,000	545,000.00	8,022,822	2,005,705.50
200,000	20,000.00	190,000	19,000.00	1,290,822	129,082.20
944,903	327,451.50	3,602,000	1,180,000.00	12,923,707	3,939,819.20
1,994,903	1,377,451.50	5,552,000	3,130,000.00	20,424,529	11,440,641.20
.....	.....	.....	.....	8,153,062	407,653.10
.....	.....	.....	.....	46,168,422	461,684.22
.....	.....	.....	.....	54,321,484	869,337.32
3,291,478	24,332,951.50	5,552,000	3,130,000.00	78,330,773	71,188,468.52

XIV.—Coinage Executed at the Mints of the United

Denomination.	PHILADELPHIA.	
	Pieces.	Value.
GOLD.		
Double eagles	1,114,656	$22,293,120.00
Eagles	567,826	5,678,260.00
Half eagles	1,345,936	6,729,680.00
Quarter eagles	6,119	15,297.50
Total gold coinage	3,034,537	34,716,357.50
SILVER.		
Dollars, act July 14, 1890	12,880	12,880.00
Subsidiary:		
Half dollars	1,835,218	917,609.00
Quarter dollars	4,440,880	1,110,220.00
Dimes	690,880	69,088.00
Total subsidiary	6,966,978	2,096,917.00
Total silver coinage	6,979,858	2,109,797.00
MINOR.		
Five cents	9,979,884	498,994.20
One cent	38,343,636	383,436.36
Total minor coinage	48,323,520	882,430.56
Total coinage	58,337,915	37,708,585.06

In addition to the above, the mint at Philadelphia executed for the Government of Ecuador 5,000,000 20-cent silver pieces of the value of $1,000,000.

Coinage operations at the mint at New Orleans suspended from November 1, 1895, to February 1, 1896.

Coinage of silver dollars under act of—

February 28, 1878	$378,166,793
July 14, 1890	40,044,364
March 31, 1891	5,078,472
Total	423,289,629

STATES DURING THE CALENDAR YEAR ENDED DECEMBER 31, 1895.

SAN FRANCISCO.		NEW ORLEANS.		TOTAL.	
Pieces.	Value.	Pieces.	Value.	Pieces.	Value.
1,143,500	$22,870,000.00	.....	.....	2,258,156	$45,163,120.00
49,000	490,000.00	98,000	$980,000.00	714,826	7,148,260.00
112,000	560,000.00	.....	.....	1,457,936	7,289,680.00
.....	.....	.....	.....	6,119	15,297.50
1,304,500	23,920,000.00	98,000	980,000.00	4,437,037	59,616,357.50
400,000	400,000.00	450,000	450,000.00	862,880	862,880.00
1,108,086	554,043.00	1,766,000	883,000.00	4,709,304	2,354,652.00
1,764,681	441,170.25	2,816,000	704,000.00	9,021,561	2,255,390.25
1,120,000	112,000.00	440,000	44,000.00	2,250,880	225,088.00
3,992,767	1,107,213.25	5,022,000	1,631,000.00	15,981,745	4,835,130.25
4,392,767	1,507,213.25	5,472,000	2,081,000.00	16,844.625	5,698,010.25
.....	.....	.....	.....	9,979,884	498,994.20
.....	.....	.....	.....	38,343,636	383,436.36
.....	.....	.....	.....	48,323,520	882,430.56
5,697,267	25,427,213.25	5,570,000	3,061,000.00	69,605,182	66,196,798.31

LIBRARY
OF THE
UNIVERSITY of ILLINOIS.

XV.—Earnings and Expenditures of the United States Mints

EARNINGS

Item.	MINTS.			
	Philadelphia.	San Francisco.	New Orleans.	Carson.
Charges for parting and refining	$29,268.56	$23,588.80	$1,003.70	$1,177.49
Charges for alloy	879.85	2,261.92	18.80	27.27
Charges for assaying, melting, and stamping				1,631.79
Seigniorage on standard silver dollars	1,349,988.02	322,801.03	654,947.91	
Seigniorage on subsidiary coinage	112,645.21	62,674.31		
Seigniorage on minor coins	613,233.83			
Seigniorage on recoinage of incurrent minor coins	16,297.39			
Profit on medals and proof coins	1,166.79			
Charges received for mounting, etc., medal fund	321.75			
Deposit melting-room grains and sweepings	160.73	297.84		103.02
Surplus bullion returned by operative officers	959.01	21,553.55	347.46	78.77
Gain on bullion shipped mint for coinage				822.77
Proceeds of sale of old material	587.54	283.63	114.40	18.50
Receipts from assays of bullion	210.00		4.00	94.00
Receipts from sale of by-products		1,288.69		
Amount received for repairing counting boards for the Treasury	365.87			
Total	2,126,084.55	434,749.77	656,436.27	3,953.61

EXPENDITURES

Salaries of officers and clerks	$41,453.86	$41,099.91	$31,238.34	$15.104.04
Wages of workmen and adjusters	309,123.56	184,511.75	67,776.90	13,580.25
Contingent expenses, less amount paid to reimburse wastage and loss on sweeps sold	55,711.34	34,771.77	13,599.42	5,598.04
Parting and refining expenses, less amount paid to reimburse wastage and loss on sweeps sold	28,060.00	23,726.80	243.30	1,018.59
Wastage of the operative departments	5,496.32	3,857.49	1,268.76	
Loss on sweeps sold during the year	1,533.98	1,698.06	891.48	
Expenses of distributing minor coins	14,602.63			
Loss on sale of leady melts				
Expenses of medal fund (charges paid for mounting, etc)	321.75			
Loss on recoinage of minor coins	12,754.96			
Total	469,058.40	289,665.78	115,018.20	35,300.92

AND ASSAY OFFICES FOR THE FISCAL YEAR ENDED JUNE 30, 1896.

AND GAINS.

ASSAY OFFICES.						Total.
New York.	Denver.	Helena.	Boise.	Charlotte.	St. Louis.	
$109,399.21						$164,437.76
3,413.60						6,601.44
	$3,983.67	$2,966.44	$1,448.44	$377.86	$197.90	10,606.10
						2,327,736.96
						175,319.52
						613,233.83
						16,297.39
						1,166.79
						321.75
2,682.65	a 2,004.04	b 661.17	c 808.45	73.13	128.75	6,919.78
15,425.22						38,364.01
	2,625.57	2,031.79	869.58	384.43	270.24	7,004.38
348.58	1.50	44.25				1,398.40
1,221.00	22.00	353.00	1,307.50	371.00	86.00	3,668.50
9,337.99						10,626.68
						365.87
141,828.25	8,636.78	6,056.65	4,433.97	1,206.42	682.89	3,384,069.16

AND LOSSES.

$39,250.00	$12,350.00	$7,250.00	$3,200.00	$2,750.00	$3,000.00	196,696.15
26,896.50	20,000.00	13,227.00	6,817.47	1,080.00	1,006.50	644,019.93
9,537.86	4,557.06	4,969.45	2,182.53	919.72	379.37	132,226.56
86,712.46						139,761.15
						10,622.57
8,392.95						12,516.47
						14,602.63
44.61						44.61
						321.75
						12,754.96
170,834.38	36,907.06	25,446.45	12,200.00	4,749.72	4,385.87	1,163,566.78

a Of this amount $900 was from the sale of old crucible tailings.
b Of this amount $113.78 was from the sale of old crucible tailings.
c Of this amount $432.32 was from deposit of melting room, ashes, etc.

XVI.—SEIGNIORAGE ON THE COINAGE OF SILVER AND DISPOSITION

1895.			
July 1.	Balance on hand:		
	Philadelphia	$31,900.47	
	San Francisco	122,516.28	
	New Orleans	16,793.54	
			$171,210.29
	Seigniorage on silver dollars:		
	Philadelphia	1,349,988.02	
	San Francisco	322,801.03	
	New Orleans	654,947.91	
			2,327,736.96
	Seigniorage on subsidiary silver:		
	Philadelphia	112,645.21	
	San Francisco	62,674.31	
			175,319.52
	Total		2,674,266.77

OF THE SAME DURING THE FISCAL YEAR ENDED JUNE 30, 1896.

Paid on account of wastage and loss on sale of sweeps:			
Philadelphia			$1,345.96
Deposited in the United States Treasury as follows:			
PHILADELPHIA.			
Warrant No. 648	$3,740.28		
651	28,160.19		
1999	100,000.00		
1983	269,948.29		
914	270,157.36		
2251	269,948.29		
2252	269,948.29		
			1,211,902.70
SAN FRANCISCO.			
Warrant No. 649	122,516.28		
1954	51,875.05		
821	10,799.26		
1985	30,741.69		
2255	199,827.62		
			415,759.90
NEW ORLEANS.			
Warrant No. 650	16,793.54		
1984	167,935.36		
913	167,935.36		
2253	117,554.75		
2254	100,761.22		
			570,980.23
1896.			
June 30. Balance on hand:			
Philadelphia	281,285.04		
San Francisco	92,231.72		
New Orleans	100,761.22		
			474,277.98
Total			2,674,266.77

These balances have since been covered into the Treasury:			
Philadelphia, Warrant No. 534	$269,985.79		
Philadelphia, Warrant No. 2021	11,299.25		
		$281,285.04	
San Francisco, Warrant No. 532		92,231.72	
New Orleans, Warrant No. 533		100,761.22	
			$474,277.98

XVII.—ASSETS AND LIABILITIES OF THE UNITED STATES

ASSETS.

Institutions.	GOLD BULLION.		SILVER BULLION.	
	Standard ounces.	Value.	Standard ounces.	Value (cost).
COINAGE MINTS.				
Philadelphia	423,269.237	$7,874,776.50	128,904,107.81	$105,222,513.77
San Francisco	31,000.279	576,749.28	11,597,946.11	9,512,825.23
New Orleans	15,463.279	287,689.20	6,640,286.40	5,226,045.49
Carson	12,571.313	233,884.85	635,817.47	457,315.79
ASSAY OFFICES.				
New York	1,238,292.860	23,038,006.50	553,560.07	514,751.01
Denver				
Helena	2,867.459	52,992.12	593.25	355.95
Boise	1,328.105	24,708.93	134.78	80.87
Charlotte			1.00	.56
St. Louis	758.862	14,118.36	114.85	68.91
Total	1,725,551.394	32,102,925.74	148,332,561.74	120,933,957.58

LIABILITIES.

Institutions.	Bullion fund.	Undeposited earnings.
COINAGE MINTS.		
Philadelphia	$179,157,652.78	
San Francisco	51,766,106.29	$17,993.90
New Orleans	18,769,805.92	
Carson	5,941,960.22	
ASSAY OFFICES.		
New York	23,988,670.82	28,881.15
Denver	169,178.04	
Helena	164,754.78	193.02
Boise	73,848.89	64.57
Charlotte	34,183.75	
St. Louis	56,299.10	
Total	280,122,460.59	47,132.64

MINTS AND ASSAY OFFICES, JUNE 30, 1896.

ASSETS.

Gold coin.	Silver coin.	Credit balances with assistant treasurers and depository banks.	Minor coin.	Minor coinage metal.	Deficiencies.	Total.
$5,711,965.00	$60,616,805.06	.....	$179,345.61	$135,826.90	$13,543.82	$179,754,776.66
3,723,175.00	37,650,637.54	.....	.....	.....	413,557.96	51,876,945.01
1,403,590.00	11,928,316.24	.....	.....	.....	25,000.00	18,870,640.93
390.07	5,145,081.58	*a* $29,738.18	.....	.....	75,549.75	5,941,960.22
9,280.00	949.48	*b* 484,171.91	.....	.....	.....	24,047,158.90
.....	.....	169,178.04	.....	.....	.....	169,178.04
.....	.....	111,599.73	.....	.....	.....	164,947.80
.....	.....	49,123.66	.....	.....	.....	73,913.46
.....	.....	34,183.19	.....	.....	.....	34,183.75
.....	.....	42,111.83	.....	.....	.....	56,299.10
10,848,400.07	115,341,789.90	920,106.54	179,345.61	135,826.90	527,651.53	280,990,003.87

a Gold coin. *b* Gold coin, $425,170.71; silver coin, $59,001.20.

LIABILITIES.

Seigniorage on silver.	Unpaid depositors.	Minor coinage profits.	Minor coin metal fund.	Unpaid cent depositors and subtreasury transfers.	Total.
$281,285.04	$666.33	$112,368.31	$29,500.00	$173,304.20	$179,754,776.66
92,231.72	613.10	.....	.....	.....	51,876,945.01
100,761.22	73.79	.....	.....	.....	18,870,640.93
.....	.....	.....	.....	.....	5,941,960.22
.....	29,606.93	.....	.....	.....	24,047,158.90
.....	.....	.....	.....	.....	169,178.04
.....	.....	.....	.....	.....	164,947.80
.....	.....	.....	.....	.....	73,913.46
.....	.....	.....	.....	.....	34,183.75
.....	.....	.....	.....	.....	56,299.10
474,277.98	30,960.15	112,368.31	29,500.00	173,304.20	280,990,003.87

XVIII.—GOLD, SILVER, AND BRONZE MEDALS MANUFACTURED AT THE MINT OF THE UNITED STATES AT PHILADELPHIA DURING THE FISCAL YEAR ENDED JUNE 30, 1896.

Name.	Gold.	Silver.	Bronze.
Arthur, Chester A., President	.....	.....	5
American Society Civil Engineers	1	.....	.....
Armstrong, Colonel, destruction Indian village	.....	.....	10
Assay commission	.....	35	.....
Boston police	1	.....	.....
Brown Memorial	.....	10	.....
Burrows, Captain, for capture of the Boxer	.....	.....	5
Carlisle, John G., Secretary	.....	.....	160
Carney	.....	12	.....
Cleveland, Grover, President	.....	.....	15
Commencement of Cabinet	1	.....	.....
Corcoran Art Gallery	2	.....	.....
Count Rumford	1	1	.....
Dodd, Hannah Matilda	1	2	.....
Elliott	10	.....	10
First steam navigation	.....	.....	6
Franklin	.....	26	.....
Harrison, Benjamin, Indian peace	.....	.....	5
Harrison, Major-General, for the Thames	.....	.....	5
Harrison, Benjamin, Indian peace (oblong)	.....	.....	5
Indian peace	.....	7	5
Ingraham, Captain, for rescue of Martin Koszta	.....	.....	5
Ketchum, Jesse:			
Large	3	39	.....
Small	3	40	.....
Kretz, Herman, superintendent	.....	.....	85
Laurence, Captain, for Capt. Peacock	.....	.....	5
Leech, E. O., director	.....	.....	5
Life saving	24	.....	.....
Lincoln, Abraham, President	.....	.....	10
Macomb, Major, battle of Plattsburg	.....	.....	5
Massachusetts Humane Society	.....	20	.....
McDonough, Captain, British fleet, Lake Erie	.....	.....	10
McKee, Thomas	1	.....	.....
Newport, R. I., School	.....	.....	3
Pauline	.....	1	.....
Pharmacy, Philadelphia College	4	.....	7
Pennsylvania Horticultural Society	.....	3	.....
Philadelphia Rifle Club	1	.....	.....
Phillips, David K	1	3	.....
Preble, Captain, before Tripoli	.....	.....	5
St. John's Commandery, Philadelphia	.....	.....	50
Stewart, Captain, for capture of the Cyane and Levant	.....	.....	5
St. Louis Agricultural and Mechanical Association	.....	8	17
Taylor, Major, for Monterey	.....	.....	5
Taylor, Major, for Buena Vista	.....	.....	5
Time Increases his Fame	.....	.....	10
Townsend, Eugene, superintendent (for Cabinet)	.....	.....	2
Truxton, Thomas, Captain	.....	.....	5
Taylor, Zachary, President	.....	.....	5
United States Naval Institute	1	.....	.....

XVIII.—GOLD, SILVER, AND BRONZE MEDALS MANUFACTURED AT THE MINT OF THE UNITED STATES AT PHILADELPHIA DURING THE FISCAL YEAR ENDED JUNE 30, 1806—Continued.

Name.	Gold.	Silver.	Bronze.
University of Rochester			10
Valley Forge Centennial		6	
Washington and Lee University	3		
Washington wreath medalets		200	
Washington Before Boston			10
Total	58	413	495

XIX.—COINAGE DIES MANUFACTURED AT THE MINT AT PHILADELPHIA DURING THE FISCAL YEAR ENDED JUNE 30, 1896.

Denomination of die.	Philadelphia.	San Francisco.	New Orleans.	Total.
GOLD COINAGE.				
Double eagle	56	12		68
Eagle	20	6		26
Half eagle	7	6		13
Quarter eagle	4			4
Total	87	24		111
SILVER COINAGE.				
Standard dollar	40	40	40	120
Half dollar	26	24	20	70
Quarter dollar	81	20	20	121
Dime	18	20		38
Total	165	104	80	349
MINOR COINAGE.				
Five cent	103			103
One cent	286			286
Total	389			389

RECAPITULATION.

Description.	Number prepared.
Gold coinage	111
Silver coinage	349
Minor coinage	389
Proof coinage	22
Columbian award	3
Atlanta Exposition hubs	2
Atlanta Exposition dies	2
Superintendent United States Mint, Philadelphia	2
Annual assay	2
Medalet, Washington	1
Total	883

XX.—EXPENDITURES FOR DISTRIBUTION OF MINOR COINS FROM JULY 1, 1878, TO JUNE 30, 1896.

Fiscal year.	Amount expended.	Fiscal year.	Amount expended.
1879	$1,299.97	1889	$23,441.04
1880	12,592.83	1890	23,923.76
1881	23,763.46	1891	29,268.86
1882	24,565.84	1892	27,149.92
1883	28,512.54	1893	22,666.43
1884	29,152.32	1894	12,038.28
1885	12,251.98	1895	12,240.21
1886	847.17	1896	14,602.63
1887	15,914.55	Total	338,732.57
1888	24,500.78		

XXI.—WASTAGE AND LOSS ON SALE OF SWEEPS, FISCAL YEAR 1896.

Loss.	MINT AT—			Assay office at New York.	Total.
	Philadelphia.	San Francisco.	New Orleans.		
Coiner's gold wastage	$539.07	$3,542.81	.....	.....	$4,081.88
Melter and refiner's gold wastage	3,678.72	.....	.....	.....	3,678.72
Melter and refiner's silver wastage	.....	.....	$970.25	.....	970.25
Coiner's silver wastage	1,278.53	314.68	298.51	.....	1,891.72
Loss on sale of sweeps	1,533.98	1,698.06	891.48	$8,392.95	12,516.47
Total	7,030.30	5,555.55	2,160.24	8,392.95	23,139.04
Paid as follows:					
From contingent appropriation	4,127.96	.....	1,812.78	.....	5,940.74
From parting and refining appropriation	436.64	.....	.....	.....	436.64
From surplus bullion, profit and loss	1,119.74	5,555.55	347.46	8,392.95	15,415.70
From silver profit fund	1,345.96	.....	.....	.....	1,345.96
Total	7,030.30	5,555.55	2,160.24	8,392.95	23,139.04

XXII.—IMPORTS INTO THE UNITED STATES OF GOLD AND SILVER ORE, BULLION,

Customs districts.	GOLD.								
	Contained in—		Total.	Ore.	Bullion.		Coin.		Total gold.
	Base bullion.	Silver ore.			Ounces.	Value.	United States.	Foreign.	
New York	$198,030	.....	$198,030	$1,996	.....	$10,061,272	$5,370,000	$7,586,320	$23,217,618
Arizona	.....	$286,033	286,033	26,958	43,707	883,948	.....	.....	1,196,939
Champlain	.....	.....	.....	.....	.....	68,707	4,274,286	104,708	4,447,701
Mobile	.....	.....	.....	.....	.....	.....	592	348	940
Niagara	.....	.....	.....	.....	.....	87,100	200,000	61,557	348,657
Vermont	.....	.....	.....	.....	.....	.....	55,000	.....	55,000
New London	.....	.....	.....	.....	.....	.....	4,195	.....	4,195
Minnesota	109	.....	109	.....	.....	.....	.....	.....	109
Detroit	.....	.....	.....	.....	154	2,895	.....	.....	2,895
Saluria	48,840	16,082	64,922	.....	.....	.....	8,690	.....	73,612
New Orleans	.....	.....	.....	.....	8,832	147,688	.....	.....	147,688
Brazos Santiago	.....	.....	.....	.....	.....	.....	.....	.....	.....
Omaha	.....	.....	.....	.....	.....	.....	.....	.....	.....
San Diego	.....	.....	.....	4,862	5,438	97,613	.....	.....	102,475
Puget Sound	.....	664,530	664,530	59,244	500	10,000	.....	.....	733,774
Montana and Idaho	.....	.....	.....	.....	.....	.....	.....	.....	.....
Paso del Norte	.....	343,296	343,296	.....	34,557	721,366	.....	35,782	1,100,444
San Francisco	.....	132,271	132,271	30,852	44,237	951,093	92,018	.....	1,206,234
Corpus Christi	18,681	.....	18,681	.....	21,052	442,187	124,058	5,013	589,939
Galveston	2,514	.....	2,514	.....	.....	.....	.....	.....	2,514
Boston and Charlestown	.....	.....	.....	.....	5,439	106,545	.....	.....	106,545
Philadelphia	.....	.....	.....	.....	.....	.....	.....	10,070	10,070
Bangor	.....	.....	.....	1,300	4,475	82,992	60,775	12,450	157,517
Cape Vincent	.....	.....	.....	.....	.....	.....	.....	.....	.....
Kansas City	1,967	.....	1,967	.....	.....	.....	.....	.....	1,967
Oswegatchie	.....	.....	.....	600	.....	.....	.....	.....	600
Pittsburg	420	.....	420	.....	.....	.....	.....	.....	420
Total	270,561	1,442,212	1,712,773	125,812	.....	13,663,406	10,189,614	7,816,248	33,507,853

AND COIN, BY CUSTOMS DISTRICTS, DURING THE FISCAL YEAR ENDED JUNE 30, 1896.

SILVER.								
Contained in—		Total.	Ore.	Bullion.		Coin.		Total silver.
Base bullion.	Silver ore.			Ounces.	Value.	United States.	Foreign.	
$5,406,644	.....	$5,406,644	$335,069	1,519,488	$882,072	$63,816	$1,066,920	$7,754,521
.....	$1,261,239	1,261,239	10,492	848,191	544,410	.....	.....	1,816,141
.....	.....	.....	.....	.....	.....	15,140	2,057	17,197
.....	.....	.....	.....	.....	.....	321	29,902	30,223
.....	.....	.....	.....	.....	.....	3,900	.....	3,900
.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	32	.....	32
45,837	.....	45,837	.....	.....	.....	.....	.....	45,837
.....	.....	.....	.....	133	70	.....	.....	70
514,914	169,362	684,276	.....	202,734	108,366	98	154,581	947,321
.....	.....	.....	.....	.....	.....	3,215	356,930	360,145
.....	.....	.....	.....	.....	.....	.....	67,129	67,129
.....	417,309	417,309	.....	.....	.....	.....	.....	417,309
.....	.....	.....	.....	.....	.....	.....	.....	.....
169,918	691,043	860,961	2,830	.....	.....	.....	.....	863,791
.....	142,480	142,480	.....	.....	.....	.....	.....	142,480
.....	2,951,283	2,951,283	.....	1,308,663	764,907	.....	5,739,483	9,455,673
.....	602,934	602,934	.....	2,140,831	1,405,733	975	632,730	2,642,372
310,497	.....	310,497	.....	157,714	106,551	.....	495,244	912,292
32,940	.....	32,940	.....	.....	.....	.....	.....	32,940
.....	.....	.....	.....	.....	.....	184	.....	184
.....	.....	.....	.....	.....	.....	.....	370	370
.....	.....	.....	.....	.....	.....	5,176	400	5,576
.....	.....	.....	.....	.....	.....	200	.....	200
193,952	.....	193,952	.....	.....	.....	.....	.....	193,952
.....	.....	.....	.....	.....	.....	.....	.....	.....
1,604,360	.....	1,604,360	.....	.....	.....	.....	.....	1,604,360
8,279,062	6,235,650	14,514,712	348,391	6,177,754	3,812,109	93,057	8,545,746	27,314,015

XXIII.—IMPORTS INTO THE UNITED STATES OF GOLD AND SILVER ORE, BUL

Countries from which exported.	GOLD.								
	Contained in—		Total.	Ore.	Bullion.		Coin.		Total gold.
	Base bullion.	Silver ore.			Ounces.	Value.	United States.	Foreign.	
Azores, and Madeira Islands							$22,893		$22,893
France						$200,098	1,964,850	$1,768,543	3,933,491
Portugal							4,195		4,195
Germany						16		119,000	119,016
Italy									
Norway and Sweden							3,461		3,461
United Kingdom						9,303,577	1,844,375	354,037	11,501,989
Bermuda								292	292
British Honduras						18,262	592	260	19,114
Dominion of Canada:									
Nova Scotia, New Brunswick, etc.				$1,300	9,914	189,537	60,775	12,450	264,062
Quebec, Ontario, etc.				600		158,702	4,529,286	166,265	4,854,853
Newfoundland								952	952
British Columbia	$2,076	$664,530	$666,606	59,244		308,344			1,034,194
Central American States:									
Costa Rica				1,000		23,485	3,980		28,465
Guatemala						2,318		98	2,416
Honduras						93,201	1,286	86	94,573
Nicaragua						182,502	17,530		200,032
Salvador						2,392	500		2,892
Mexico	268,485	777,682	1,046,167	62,672		2,826,327	246,951	72,482	4,254,599
Miquelon, Langley, etc.								1,200	1,200
West Indes:									
British				5		2,275	207,375	22,957	232,612
Danish							35,464	9,000	44,464
Dutch						911	66,791	5,847	73,549
French							7,649	7,782	15,431
Haiti						2,595	530,598		533,193
Santo Domingo							41,391	459	41,850
Spanish—									
Cuba							3,400	5,184,732	5,188,132
Puerto Rico						150	4,470	2,285	6,905
Brazil							800	1,097	1,897
Chile						500	2,272	58,056	60,828
Colombia						332,644	66,075	25,432	424,151
Ecuador						2,993		65	3,058
Guiana:									
British									
Dutch						9,053		63	9,116
Peru				991		1,174		19	2,184
Venezuela						2,350	517,740	2,789	522,879
China									
Hongkong									
French Oceanica									
Japan							4,915		4,915
Tonga, Samoa, etc.									
Total	270,561	1,442,212	1,712,773	125,812		13,663,406	10,189,614	7,816,243	33,507,853

LION, AND COIN, BY COUNTRIES, DURING THE FISCAL YEAR ENDED JUNE 30, 1896.

SILVER.								
Contained in—		Total.	Ore.	Bullion.		Coin.		Total silver.
Base bullion.	Silver ore.			Ounces.	Value.	United States.	Foreign.	
			$87	9,160	$6,176	$1,870		$8,133
						32		32
						2,359	$952	3,311
						40		40
						68	2	70
						7,441	6,487	13,928
						3,429	316,167	319,596
						5,360	400	5,760
				133	70	19,240	2,057	21,367
$409,707	$1,206,976	$1,616,683	2,830					1,619,513
							275	275
							75,164	75,164
			2,408	570,751	316,610	226	67,817	387,061
							190,669	190,669
				15,755	10,555	351	51,278	62,184
7,869,355	5,028,674	12,898,029	10,492	5,538,856	3,455,044	7,895	7,051,333	23,422,793
							1,040	1,040
						5,552	10,874	16,426
						3,180	12,434	15,614
						509	9,811	10,320
						55	2	57
							4,532	4,532
						320	152,577	152,897
				3,325	1,490	297	10,754	12,541
						2,878	10,126	13,004
			3,532					3,532
			13,676	39,167	21,785	30,659	519,787	585,907
				297	191	111	426	728
			315,366	310	188	50	45,422	361,026
						160	759	919
							438	438
							13	13
							4,150	4,150
						975		975
8,279,062	6,235,650	14,514,712	348,391	6,177,754	3,812,109	93,057	8,545,746	27,314,015

XXIV.—EXPORTS OF DOMESTIC GOLD AND SILVER ORE, BULLION, AND COIN YEAR ENDED

Customs Districts.	GOLD.								
	Contained in—		Total.	United States Mint or assay office bars.		Other bullion.		Coin.	Total.
	Silver ore.	Copper matte.		Ounces.	Value.	Ounces.	Value.		
Baltimore	.....	$2,627	$2,627	.....	.....	.....	.....	.....	$2,627
Bangor	.....	.....	.....	.....	.....	.....	.....	$25,000	25,000
Buffalo Creek	.....	.....	.....	.....	.....	.....	.....	.....	.....
Champlain	.....	.....	.....	771	$15,420	.....	.....	4,408,550	4,423,970
Corpus Christi	.....	.....	.....	.....	.....	.....	.....	.....	.....
Detroit	$6	.....	6	.....	.....	.....	.....	.....	6
Mobile	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Orleans	.....	.....	.....	.....	.....	.....	.....	9,500	9,500
New York	.....	98,178	98,178	1,254,995	25,828,938	140,475	$3,109,767	71,602,428	100,639,311
Niagara	.....	.....	.....	.....	.....	4,114	82,277	708,290	790,567
Puget Sound	.....	.....	.....	.....	.....	.....	.....	62,837	62,837
San Diego	.....	.....	.....	.....	.....	.....	.....	5,000	5,000
San Francisco	.....	.....	.....	.....	.....	329	7,235	847,319	854,554
Saluria	.....	.....	.....	.....	.....	.....	.....	4,905	4,905
Vermont	.....	.....	.....	.....	.....	.....	.....	116,063	116,063
Total	6	100,805	100,811	1,255,766	25,844,358	144,918	3,199,279	77,789,892	106,934,340

FROM CERTAIN CUSTOMS DISTRICTS OF THE UNITED STATES DURING THE FISCAL JUNE 30, 1896.

SILVER.							
Contained in copper matte.	Total.	United States Mint or assay office bars.		Other bullion.		Coin.	Total.
		Ounces.	Value.	Ounces.	Value.		
$23,652	$23,652						$23,652
				496	$358		358
		1,094	$765	556	392		1,157
				6,540	4,475		4,475
						$5,330	5,330
						1,282	1,282
654,332	654,332			67,363,954	45,630,346	23,300	46,307,978
				50,785	32,943	5,080	38,023
						9,813	9,813
				9,679,775	6,454,543	17,500	6,472,043
		279	207	1,374	935	226,548	227,690
677,984	677,984	1,373	972	77,103,480	52,123,992	288,853	53,091,801

XXV.—EXPORTS OF DOMESTIC GOLD AND SILVER ORE, BULLION, AND COIN TO JUNE

Countries.	GOLD.								
	Contained in—		Total.	United States Mint or assay office bars.		Other bullion.		Coin.	Total.
	Silver ore.	Copper matte.		Ounces.	Value.	Ounces.	Value.		
France	.....	.....	.....	.....	.....	121,034	$2,708,898	$2,000,500	$4,709,398
Germany	.....	.....	.....	173,083	$3,548,437	276	5,660	25,466,575	29,020,672
United Kingdom:									
England	.....	$100,805	$100,805	1,081,912	22,280,501	19,165	395,209	38,520,000	61,296,515
Scotland	.....	.....	.....	.....	.....	.....	.....	300	300
British Honduras	.....	.....	.....	.....	.....	.....	.....	9,500	9,500
Dominion of Canada:									
Nova Scotia	.....	.....	.....	.....	.....	.....	.....	25,000	25,000
Quebec, Ontario, etc.	$6	.....	6	771	15,420	4,114	82,277	5,232,903	5,330,606
British Columbia	.....	.....	.....	.....	.....	.....	.....	62,837	62,837
Central American States:									
Costa Rica	.....	.....	.....	.....	.....	.....	.....	5,400	5,400
Guatemala	.....	.....	.....	.....	.....	.....	.....	18,100	18,100
Mexico	.....	.....	.....	.....	.....	.....	.....	10,990	10,990
British West Indies	.....	.....	.....	.....	.....	.....	.....	28,000	28,000
British East Indies	.....	.....	.....	.....	.....	.....	.....	.....	.....
Haiti	.....	.....	.....	.....	.....	.....	.....	837,103	837,103
Santo Domingo	.....	.....	.....	.....	.....	.....	.....	172,546	172,546
Spanish Cuba	.....	.....	.....	.....	.....	.....	.....	10,075	10,075
Puerto Rico	.....	.....	.....	.....	.....	.....	.....	1,400	1,400
Argentina	.....	.....	.....	.....	.....	.....	.....	3,500,000	3,500,000
Colombia	.....	.....	.....	.....	.....	.....	.....	19,000	19,000
British Guiana	.....	.....	.....	.....	.....	.....	.....	1,000	1,000
Venezuela	.....	.....	.....	.....	.....	.....	.....	1,042,529	1,042,529
China	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hongkong	.....	.....	.....	.....	.....	329	7,235	111,314	118,549
Japan	.....	.....	.....	.....	.....	.....	.....	4,630	4,630
Hawaiian Islands	.....	.....	.....	.....	.....	.....	.....	710,190	710,190
Total	6	100,805	100,811	1,255,766	25,844,358	144,918	3,199,279	77,789,892	106,934,340

CERTAIN COUNTRIES FROM THE UNITED STATES DURING THE FISCAL YEAR ENDED 30, 1896.

SILVER.							
Contained in copper matte.	Total.	United States Mint or assay office bars.		Other bullion.		Coin.	Total.
		Ounces.	Value.	Ounces.	Value.		
.....	.....	.....	.....	4,959,307	$3,377,126	.....	$3,377,126
.....	.....	.....	.....	539	360	$800	1,160
$677,984	$677,984	.....	.....	61,401,585	41,578,367	.....	42,256,351
.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	496	358	.....	358
.....	.....	1,373	$972	59,255	38,745	231,628	271,345
.....	.....	.....	.....	.....	.....	9,813	9,813
.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	1,028,074	694,893	1,282	696,175
.....	.....	.....	.....	.....	.....	5,330	5,330
.....	.....	.....	.....	.....	.....	500	500
.....	.....	.....	.....	149,800	100,600	.....	100,600
.....	.....	.....	.....	.....	.....	22,000	22,000
.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	3,649,437	2,383,710	.....	2,383,710
.....	.....	.....	.....	1,417,468	939,850	.....	939,850
.....	.....	.....	.....	4,437,519	3,009,983	.....	3,009,983
.....	.....	.....	.....	.....	.....	17,500	17,500
677,984	677,984	1,373	972	77,103,480	52,123,992	288,853	53,091,801

XXVI.—EXPORTS OF FOREIGN GOLD AND SILVER FROM THE UNITED STATES

Customs districts.	GOLD.					
	In base bullion.	Ore.	Bullion.		Coin.	Total.
			Ounces.	Value.		
New York					$5,413,465	$5,413,465
Champlain						
Philadelphia						
Vermont						
Bangor					61,600	61,600
Baltimore						
Boston and Charlestown						
New Orleans			26	$546		546
Galveston	$2,514					2,514
Saluria						
Paso del Norte						
Corpus Christi						
San Diego						
San Francisco						
Mobile						
Total	2,514		26	546	5,475,065	5,478,125

XXVII.—EXPORTS OF FOREIGN GOLD AND SILVER FROM THE UNITED STATES

Countries.	GOLD.					
	In base bullion.	Ore.	Bullion.		Coin.	Total.
			Ounces.	Value.		
France					$2,824,963	$2,824,963
Germany						
United Kingdom	$2,514		26	$546	27,777	30,837
Dominion of Canada:						
Quebec						
Nova Scotia					61,600	61,600
Central American States:						
Honduras						
Guatemala						
Nicaragua						
Mexico					65,179	65,179
Miquelon						
British West Indies						
Dutch West Indies						
Santo Domingo					1,144	1,144
Spanish Cuba					2,309,266	2,309,266
Brazil						
Colombia						
Ecuador						
Peru						
Venezuela					185,136	185,136
China						
Hongkong						
Japan						
Total	2,514		26	546	5,475,065	5,478,125

BY CUSTOMS DISTRICTS DURING THE FISCAL YEAR ENDED JUNE 30, 1896.

SILVER.					
In base bullion.	Ore.	Bullion.		Coin.	Total.
		Ounces.	Value.		
.....	$730	1,000	$680	$1,822,180	$1,823,590
.....	.....	.....	.....	54,430	54,430
.....	.....	.....	.....	650	650
.....	.....	.....	.....	63,258	63,258
.....	.....	.....	.....	985	985
.....	.....	.....	.....	2,238	2,238
.....	.....	.....	.....	12,000	12,000
.....	.....	16,288	10,843	2,425	13,268
$32,940	.....	.....	.....	.....	32,940
.....	.....	.....	.....	153,818	153,818
.....	.....	.....	.....	16,227	16,227
.....	.....	.....	.....	13,370	13,370
.....	.....	.....	.....	5,010	5,010
.....	.....	.....	.....	5,291,406	5,291,406
.....	.....	.....	.....	1,282	1,282
32,940	730	17,288	11,523	7,439,279	7,484,472

TO CERTAIN COUNTRIES DURING THE FISCAL YEAR ENDED JUNE 30, 1896.

SILVER.					
In base bullion.	Ore.	Bullion.		Coin.	Total.
		Ounces.	Value.		
.....	.....	.....	.....	$58,200	$58,200
.....	.....	.....	.....	9,019	9,019
$32,940	$730	17,288	$11,523	1,114,523	1,159,716
.....	.....	.....	.....	117,688	117,688
.....	.....	.....	.....	985	985
.....	.....	.....	.....	4,237	4,237
.....	.....	.....	.....	1,282	1,282
.....	.....	.....	.....	2,425	2,425
.....	.....	.....	.....	215,391	215,391
.....	.....	.....	.....	12,000	12,000
.....	.....	.....	.....	10,264	10,264
.....	.....	.....	.....	1,252	1,252
.....	.....	.....	.....	423,150	423,150
.....	.....	.....	.....	5,577	5,577
.....	.....	.....	.....	58,498	58,498
.....	.....	.....	.....	26,343	26,343
.....	.....	.....	.....	98,000	98,000
.....	.....	.....	.....	15,605	15,605
.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	1,152,946	1,152,946
.....	.....	.....	.....	3,739,145	3,739,145
.....	.....	.....	.....	372,749	372,749
32,940	730	17,288	11,523	7,439,279	7,484,472

XXVIII.—RECAPITULATION OF IMPORTS AND EXPORTS OF THE PRECIOUS METALS DURING THE FISCAL YEAR ENDED JUNE 30, 1896.

Description.	Imports.	Exports.	Excess.	
			Imports.	Exports.
GOLD.				
Contained in:				
Base bullion	$270,561	a$2,514	$268,047	
Silver-lead ore	1,442,212	6	1,442,206	
Copper matte		100,805		$100,805
Ore	125,812		125,812	
Bars, United States mint or assay office		25,844,358		25,844,358
Bullion:				
Foreign	13,663,406	546	13,662,860	
Domestic		3,199,279		3,199,279
Coin:				
Foreign	7,816,248	5,475,065	2,341,183	
Domestic	10,189,614	77,789,892		67,600,278
Total	33,507,853	112,412,465	17,840,108	96,744,720
Excess of exports over imports				78,904,612
SILVER.				
Contained in:				
Base bullion	8,279,062	a32,940	8,246,122	
Silver-lead ore	6,235,650		6,235,650	
Copper matte		677,984		677,984
Ore	348,391	a730	347,661	
Bars, United States mint or assay office		972		972
Bullion:				
Foreign	3,812,109	11,523	3,800,586	
Domestic		52,123,992		52,123,992
Coin:				
Foreign	8,545,746	7,439,279	1,106,467	
Domestic	93,057	288,853		195,796
Total	27,314,015	60,576,273	19,736,486	52,998,744
Excess of exports over imports				33,262,258

a Foreign.

XXIX.—COMPARISON OF THE BUSINESS OF THE MINTS AND ASSAY OFFICES OF THE UNITED STATES FOR THE FISCAL YEARS 1895 AND 1896.

DEPOSITS, BARS MANUFACTURED, AND COINAGE.

Institution.	DEPOSITS.		BARS MANUFACTURED.			
			Gold.		Silver.	
	1895.	1896.	1895.	1896.	1895.	1896.
Philadelphia	$24,613,799.85	$33,092,000.75	$998,337.41	$2,895,546.40	$57,321.13	$60,960.78
San Francisco	22,994,783.58	22,731,660.70	.....	.....	988.39	.....
Carson	1,660,353.89	536,817.66	664,182.12	.....	600,578.09	55,814.46
New Orleans	1,228,825.82	1,546,647.13	421.62	160.32	1,268.34	1,836.92
New York	43,232,996.34	49,091,947.71	32,137,998.12	42,325,620.18	9,568,124.93	7,118,292.92
Denver	5,637,459.51	4,225,983.41	5,594,196.43	4,168,255.39	43,263.08	57,728.02
Boise	1,198,149.91	1,166,251.68	1,179,517.54	1,144,346.15	18,632.37	21,905.53
Helena	2,233,884.40	2,387,737.55	2,185,508.56	2,336,517.64	48,375.84	51,219.91
Charlotte	236,041.00	274,569.48	234,738.84	273,225.88	1,302.16	1,343.60
St. Louis	160,161.12	106,204.58	158,470.17	104,851.82	1,690.95	1,352.75
Total	103,196,455.42	115,159,820.65	43,153,370.81	53,248,523.78	10,341,545.28	7,370,454.89

Institution.	GOLD COINAGE.		SILVER COINAGE.		MINOR COINAGE.	
	1895.	1896.	1895.	1896.	1895.	1896.
Philadelphia	$21,532,975.00	$35,922,990.00	$1,793,870.35	$6,933,189.70	$712,594.02	$869,337.32
San Francisco	21,395,500.00	22,955,500.00	3,524,610.25	1,377,451.50	.....	.....
New Orleans	1,005,000.00	.....	3,751,000.00	3,130,000.00	.....	.....
Total	43,933,475.00	58,878,490.00	9,069,480.60	11,440,641.20	712,594.02	869,337.32

BULLION OPERATIONS AND WASTAGE.

Institution.	GOLD BULLION RECEIVED BY MELTER AND REFINER.				SILVER BULLION RECEIVED BY MELTER AND REFINER.			
	Operations.		Wastage.		Operations.		Wastage.	
	1895.	1896.	1895.	1896.	1895.	1896.	1895.	1896.
	Stand.ozs.	*Stand.ozs.*	*Stand.ozs.*	*Stand.ozs.*	*Stand. ozs.*	*Stand. ozs.*	*Stan.ozs.*	*Stan.ozs.*
Philadelphia	2,586,261	3,922,717	.....	197	5,796,128	12,899,108	.....	.....
San Francisco	2,087,071	2,163,270	.....	.....	5,576,396	2,132,944	.....	.....
Carson	63,924	40,863	.....	.....	1,246,209	698,952	.....	.....
New Orleans	116,978	15,459	.....	.....	6,169,300	5,301,708	1,673	1,617
New York	1,728,707	2,295,430	.....	.....	8,231,948	6,265,972	.....	.....
Total	6,582,941	8,437,739	.....	197	27,019,981	27,298,684	1,673	1,617

COMPARISON OF THE BUSINESS OF THE MINTS AND ASSAY OFFICES OF THE UNITED STATES FOR THE FISCAL YEARS 1895 AND 1896—Continued.

COINER'S OPERATIONS AND WASTAGE.

Institution.	GOLD BULLION RECEIVED BY COINER.				SILVER BULLION RECEIVED BY COINER.			
	Operations.		Wastage.		Operations.		Wastage.	
	1895.	1896.	1895.	1896.	1895.	1896.	1895.	1896.
	Stand.ozs.	*Stand.ozs.*	*Stand.ozs.*	*Stand.ozs.*	*Stand. ozs.*	*Stand. ozs.*	*Stan.ozs.*	*Stan.ozs.*
Philadelphia	2,491,779	3,894,715	28	29	4,603,208	12,062,913	793	2,124
San Francisco	2,088,426	2,213,413	116	190	6,466,405	2,412,830	1,282	531
New Orleans	113,331	.....	1	.....	5,770,495	4,971,818	770	497
Total	4,693,536	6,108,128	145	219	16,840,108	19,447,561	2,845	3,152

OPERATIONS OF THE MINOR ASSAY OFFICES.

Institution.	GOLD BULLION OPERATIONS.		SILVER BULLION OPERATIONS.	
	1895.	1896.	1895.	1896.
	Stand. ozs.	*Stand. ozs.*	*Stand. ozs.*	*Stand. ozs.*
Denver	300,688	224,044	37,179	49,610
Boise	63,399	61,508	16,012	18,825
Helena	117,471	125,588	41,573	44,017
Charlotte	12,617	14,686	1,119	1,155
St. Louis	8,518	5,636	1,453	1,163
Total	502,693	431,462	97,336	114,770

XXX.—HIGHEST, LOWEST, AND AVERAGE PRICE OF BAR SILVER IN LONDON, PER OUNCE BRITISH STANDARD (0.925), SINCE 1833, AND THE EQUIVALENT IN UNITED STATES GOLD COIN OF AN OUNCE 1,000 FINE, TAKEN AT THE AVERAGE PRICE.

Calendar year.	Lowest quotation.	Highest quotation.	Average quotation.	Value of a fine ounce at average quotation.	Calendar Year.	Lowest quotation.	Highest quotation.	Average quotation.	Value of a fine ounce at average quotation.
	d.	*d.*	*d.*	*Dollars.*		*d.*	*d.*	*d.*	*Dollars.*
1833	58 3/4	59 7/8	59 3/16	1.297	1865	60 1/2	61 5/8	61 1/16	1.338
1834	59 1/4	60 3/4	59 15/16	1.313	1866	60 3/8	62 1/2	61 1/2	1.339
1835	59 1/4	60	59 1/16	1.308	1867	60 3/8	61 1/4	60 9/16	1.328
1836	59 5/8	60 3/8	60	1.315	1868	60 1/2	61 1/2	60 1/2	1.326
1837	59	60 3/8	59 9/16	1.305	1869	60	61	60 7/16	1.325
1838	59 1/2	60 1/2	59 1/2	1.304	1870	60 1/4	60 3/4	60 9/16	1.328
1839	60	60 5/8	60 3/8	1.323	1871	60 3/16	61	60 1/2	1.326
1840	60 1/2	60 3/4	60 3/8	1.323	1872	59 1/4	61 1/2	60 5/16	1.322
1841	59 3/4	60 3/8	60 1/16	1.316	1873	57 7/8	59 15/16	59 1/4	1.298
1842	59 1/4	60	59 7/16	1.303	1874	57 1/4	59 1/2	58 5/16	1.278
1843	59	59 5/8	59 5/16	1.297	1875	55 1/2	57 3/8	56 5/8	1.246
1844	59 1/4	59 3/4	59 1/2	1.304	1876	46 3/4	58 1/2	52 3/4	1.156
1845	58 7/8	59 7/8	59 1/4	1.298	1877	53 1/4	58 1/4	54 13/16	1.201
1846	59	60 1/8	59 5/16	1.300	1878	49 1/2	55 1/2	52 9/16	1.152
1847	58 7/8	60 3/8	59 11/16	1.308	1879	48 7/8	53 3/4	51 1/4	1.123
1848	58 1/2	60	59 1/2	1.304	1880	51 5/8	52 7/8	52 1/4	1.145
1849	59 1/2	60	59 3/4	1.309	1881	50 7/8	52 5/8	51 15/16	1.138
1850	59 1/2	61 1/2	61 1/16	1.316	1882	50	52 3/8	51 13/16	1.136
1851	60	61 5/8	61	1.337	1883	50	51 3/16	50 5/8	1.110
1852	59 7/8	61 7/8	60 1/2	1.326	1884	49 1/2	51 3/8	50 3/4	1.113
1853	60 5/8	61 7/8	61 1/2	1.348	1885	46 7/8	50	48 9/16	1.0645
1854	60 7/8	61 7/8	61 1/2	1.348	1886	42	47	45 3/8	.9946
1855	60	61 5/8	61 5/16	1.344	1887	43 1/4	47 1/2	44 5/8	.97823
1856	60 1/2	62 1/4	61 5/16	1.344	1888	41 5/8	44 9/16	42 7/8	.93974
1857	61	62 3/8	61 3/4	1.353	1889	42	44 3/8	41 11/16	.93512
1858	60 3/4	61 7/8	61 5/16	1.344	1890	43 5/8	54 5/8	47 3/4	1.04633
1859	61 3/4	62 3/4	62 1/16	1.360	1891	43 1/2	48 3/4	45 1/16	.98782
1860	61 1/4	62 3/8	61 11/16	1.352	1892	37 7/8	43 3/4	39 3/4	.87106
1861	60 1/8	61 3/8	60 13/16	1.333	1893	30 1/2	38 3/4	35 9/16	.78031
1862	61	62 1/8	61 7/16	1.346	1894	27	31 1/4	28 7/8	.63479
1863	61	61 3/4	61 3/8	1.345	1895	27 3/16	31 3/8	29 7/8	.65406
1864	60 5/8	62 1/8	61 3/8	1.345	1896	29 3/4	31 15/16	30 3/4	.67437

XXXI.—Commercial Ratio of Silver to Gold each Year since 1687.

[Note.—From 1687 to 1832 the ratios are taken from Dr. A. Soetbeer; from 1833 to 1878 from Pixley and Abell's tables; and from 1879 to 1896 from daily cablegrams from London to the Bureau of the Mint.]

Year.	Ratio.	Year.	Ratio.	Year.	Ratio.	Year.	Ratio.	Year.	Ratio.	Year.	Ratio.
1687....	14.94	1722...	15.17	1757...	14.87	1792...	15.17	1827...	15.74	1862...	15.35
1688....	14.94	1723...	15.20	1758...	14.85	1793...	15.00	1828...	15.78	1863...	15.37
1689....	15.02	1724...	15.11	1759...	14.15	1794...	15.37	1829...	15.78	1864...	15.37
1690....	15.02	1725...	15.11	1760...	14.14	1795...	15.55	1830...	15.82	1865...	15.44
1691....	14.98	1726...	15.15	1761...	14.54	1796...	15.65	1831...	15.72	1866...	15.43
1692....	14.92	1727...	15.24	1762...	15.27	1797...	15.41	1832...	15.73	1867...	15.57
1693....	14.83	1728...	15.11	1763...	14.99	1798...	15.59	1833...	15.93	1868...	15.59
1694....	14.87	1729...	14.92	1764...	14.70	1799...	15.74	1834...	15.73	1869...	15.60
1695....	15.02	1730...	14.81	1765...	14.83	1800..	15.68	1835...	15.80	1870...	15.57
1696....	15.00	1731...	14.94	1766...	14.80	1801...	15.46	1836...	15.72	1871...	15.57
1697....	15.20	1732...	15.09	1767...	14.85	1802...	15.26	1837...	15.83	1872...	15.63
1698....	15.07	1733...	15.18	1768...	14.80	1803...	15.41	1838...	15.85	1873...	15.92
1699....	14.94	1734...	15.39	1769...	14.72	1804...	15.41	1839...	15.62	1874...	16.17
1700....	14.81	1735...	15.41	1770...	14.62	1805...	15.79	1840...	15.62	1875...	16.59
1701....	15.07	1736...	15.18	1771...	14.66	1806...	15.52	1841...	15.70	1876...	17.88
1702....	15.52	1737...	15.02	1772...	14.52	1807...	15.43	1842...	15.87	1877...	17.22
1703....	15.17	1738...	14.91	1773...	14.62	1808...	16.08	1843...	15.93	1878...	17.94
1704....	15.22	1739...	14.91	1774...	14.62	1809...	15.96	1844...	15.85	1879...	18.40
1705....	15.11	1740...	14.94	1775...	14.72	1810...	15.77	1845...	15.92	1880...	18.05
1706....	15.27	1741...	14.92	1776...	14.55	1811...	15.53	1846...	15.90	1881...	18.16
1707....	15.44	1742...	14.85	1777...	14.54	1812...	16.11	1847...	15.80	1882...	18.19
1708....	15.41	1743...	14.85	1778...	14.68	1813...	16.25	1848...	15.85	1883...	18.64
1709....	15.31	1744...	14.87	1779...	14.80	1814...	15.04	1849...	15.78	1884...	18.57
1710....	15.22	1745...	14.98	1780...	14.72	1815...	15.26	1850...	15.70	1885...	19.41
1711....	15.29	1746...	15.13	1781...	14.78	1816...	15.28	1851...	15.46	1886...	20.78
1712....	15.31	1747...	15.26	1782...	14.42	1817...	15.11	1852...	15.59	1887...	21.13
1713....	15.24	1748...	15.11	1783...	14.48	1818...	15.35	1853...	15.33	1888...	21.99
1714....	15.13	1749...	14.80	1784...	14.70	1819...	15.33	1854...	15.33	1889...	22.10
1715....	15.11	1750...	14.55	1785...	14.92	1820...	15.62	1855...	15.38	1890...	19.76
1716....	15.09	1751...	14.39	1786...	14.96	1821...	15.95	1856...	15.38	1891...	20.92
1717....	15.13	1752...	14.54	1787...	14.92	1822...	15.80	1857...	15.27	1892...	23.72
1718....	15.11	1753...	14.54	1788..	14.65	1823...	15.84	1858...	15.38	1893...	26.49
1719....	15.09	1754...	14.48	1789...	14.75	1824...	15.82	1859...	15.19	1894...	32.56
1720....	15.04	1755...	14.68	1790...	15.04	1825...	15.70	1860...	15.29	1895...	31.60
1721....	15.05	1756...	14.94	1791...	15.05	1826...	15.76	1861...	15.50	1896...	30.66

XXXII.—AVERAGE PRICE OF AN OUNCE OF GOLD IN LONDON AND EQUIVALENT VALUE IN UNITED STATES, 1870–1896.

Calendar year.	Average London price.	Equivalent value in United States gold coin of an ounce of gold, British standard (916⅔).	Value in United States gold coin of an ounce 1,000 fine.	Per cent premium above Bank of England's minimum rate.
	£ s. d.			
1870	3 17 9.01	$18.9187	$20.638	0.00106
1871	3 17 9.01	18.9187	20.638	.00106
1872	3 17 9.24	18.9233	20.643	.02571
1873	3 17 9.28	18.9241	20.644	.03000
1874	3 17 9.00	18.9185	20.638	.....
1875	3 17 9.23	18.9231	20.643	.02431
1876	3 17 9.30	18.9246	20.645	.03215
1877	3 17 9.42	18.9270	20.647	.04501
1878	3 17 9.41	18.9268	20.647	.04394
1879	3 17 9.11	18.9207	20.640	.01178
1880	3 17 9.15	18.9215	20.641	.01607
1881	3 17 9.35	18.9256	20.646	.03751
1882	3 17 9.43	18.9272	20.647	.04607
1883	3 17 9.18	18.9221	20.642	.01929
1884	3 17 9.32	18.9250	20.645	.03429
1885	3 17 9.17	18.9219	20.642	.01821
1886	3 17 9.10	18.9205	20.640	.01071
1887	3 17 9.01	18.9187	20.638	.00106
1888	3 17 9.21	18.9227	20.642	.01804
1889	3 17 9.04	18.9193	20.639	.00428
1890	3 17 9.44	18.9274	20.648	.04715
1891	3 17 10.29	18.9446	20.666	.13826
1892	3 17 10.17	18.9422	20.664	.12542
1893	3 17 10.57	18.9503	20.673	*a*.16826
1894	3 17 9.33	18.9256	20.646	.03747
1895	3 17 9.03	18.9191	20.639	.00324
1896	3 17 10.16	18.9420	20.664	.12433
Mint price	3 17 10.50	18.9491	20.671	.16208
Bank price	3 17 9.00	18.9185	20.638	.....

a $0.00618 above Mint price.

XXXIII.—BULLION VALUE OF 371¼ GRAINS OF PURE SILVER AT THE ANNUAL AVERAGE PRICE, FROM 1837 TO 1896, INCLUSIVE.

Year.	Value.	Year.	Value.	Year.	Value.	Year.	Value.
1837	$1.009	1852	$1.025	1867	$1.027	1882	$0.878
1838	1.008	1853	1.042	1868	1.025	1883	.858
1839	1.023	1854	1.042	1869	1.024	1884	.861
1840	1.023	1855	1.039	1870	1.027	1885	.823
1841	1.018	1856	1.039	1871	1.025	1886	.769
1842	1.007	1857	1.046	1872	1.022	1887	.756
1843	1.003	1858	1.039	1873	1.004	1888	.727
1844	1.008	1859	1.052	1874	.988	1889	.723
1845	1.004	1860	1.045	1875	.964	1890	.809
1846	1.005	1861	1.031	1876	.894	1891	.764
1847	1.011	1862	1.041	1877	.929	1892	.673
1848	1.008	1863	1.040	1878	.891	1893	.603
1849	1.013	1864	1.040	1879	.868	1894	.491
1850	1.018	1865	1.035	1880	.886	1895	.505
1851	1.034	1866	1.036	1881	.880	1896	.522

XXXIV.—VALUE IN GOLD OF AN OUNCE OF FINE SILVER AT THE RATIOS 1:15–1:33.

Ratio.	Value of an ounce of fine silver.	Ratio.	Value of an ounce of fine silver.	Ratio.	Value of an ounce of fine silver.
1 to 15	$1.3780	1 to 20½	$1.0083	1 to 27	$0.7656
1 to 15½	1.3336	1 to 21	.9843	1 to 27½	.7517
1 to 15.988 (United States ratio)	1.2929	1 to 21½	.9614	1 to 28	.7382
		1 to 22	.9396	1 to 28½	.7253
1 to 16	1.2919	1 to 22½	.9187	1 to 29	.7109
1 to 16½	1.2527	1 to 23	.8987	1 to 29½	.7007
1 to 17	1.2159	1 to 23½	.8796	1 to 30	.6890
1 to 17½	1.1811	1 to 24	.8613	1 to 30½	.6777
1 to 18	1.1483	1 to 24½	.8437	1 to 31	.6668
1 to 18½	1.1173	1 to 25	.8268	1 to 31½	.6562
1 to 19	1.0879	1 to 25½	.8106	1 to 32	.6459
1 to 19½	1.0600	1 to 26	.7950	1 to 32½	.6360
1 to 20	1.0335	1 to 26½	.7800	1 to 33	.6264

XXXV.—UNREFINED GOLD AND SILVER OF DOMESTIC PRODUCTION, BY VALUE, ITS DISTRIBUTION BY STATES AND TERRITORIES; ALSO REFINED DOMESTIC BULLION (NOT DISTRIBUTED), DEPOSITED AT THE MINTS AND ASSAY OFFICES FROM THEIR ORGANIZATION TO THE CLOSE OF THE CALENDAR YEAR ENDED DECEMBER 31, 1895.

Source.	Gold.	Silver.	Total.
Alabama	$249,262.06	$295.97	$249,558.03
Alaska	1,833,739.15	19,783.89	1,853,523.04
Arizona	7,732,297.25	14,099,082.64	21,831,379.89
California	770,794,714.28	4,276,940.61	775,071,654.89
Colorado	70,910,438.43	24,895,976.62	95,806,415.05
Connecticut	125.82	.....	125.82
Georgia	9,338,078.91	7,333.67	9,345,412.58
Idaho	36,260,244.23	1,981,544.12	38,241,788.35
Iowa	115.59	1.38	116.97
Maine	6,311.06	22.90	6,333.96
Maryland	17,578.38	40.91	17,619.29
Michigan	454,580.58	4,104,386.17	4,558,966.75
Minnesota	5,113.59	65.66	5,179.25
Missouri	96.71	359.11	455.82
Montana	75,699,148.95	22,128,295.84	97,827,444.79
Nebraska	2,340.26	273,226.13	275,566.39
Nevada	34,727,919.89	104,397,960.61	139,125,880.50
New Hampshire	481.34	1.75	483.09
New Mexico	6,336,259.56	7,110,094.42	13,446,353.98
North Carolina	11,827,382.81	66,930.57	11,894,313.38
Oregon	22,547,378.03	100,841.73	22,648,219.76
South Carolina	2,447,831.19	4,479.05	2,452,310.24
South Dakota	54,118,376.23	1,097,131.84	55,215,508.07
Tennessee	91,088.16	15.20	91,103.36
Texas	8,141.20	3,447.01	11,588.21
Utah	1,659,555.97	19,928,986.49	21,588,542.46
Vermont	78,647.87	84.65	78,732.52
Virginia	1,763,795.40	452.16	1,764,247.56
Washington	1,117,586.65	16,223.78	1,133,810.43
Wisconsin	325.73	7.02	332.75
Wyoming	875,573.20	13,291.49	888,864.69
Other sources	42,042,421.66	42,948,142.50	84,990,564.16
Total unrefined	1,152,946,950.14	247,475,445.89	1,400,422,396.03
Refined	484,129,686.29	534,464,851.58	1,018,594,537.87
Total bullion deposited	1,637,076,636.43	781,940,297.47	2,419,016,933.90

XXXVI.—UNREFINED GOLD AND SILVER OF DOMESTIC PRODUCTION, BY VALUE, ITS DISTRIBUTION BY STATES AND TERRITORIES; ALSO REFINED DOMESTIC BULLION (NOT DISTRIBUTED) DEPOSITED AT THE MINTS AND ASSAY OFFICES FROM THEIR ORGANIZATION TO THE CLOSE OF THE FISCAL YEAR ENDED JUNE 30, 1896.

Locality.	Gold.	Silver.	Total.
Alabama	$251,797.29	$324.40	$252,121.69
Alaska	1,851,891.55	20,002.05	1,871,893.60
Arizona	8,060,256.76	14,104,313.42	22,164,570.18
California	772,148,220.55	4,292,881.49	776,441,102.04
Connecticut	125.82	.....	125.82
Colorado	72,147,580.46	24,844,142.23	96,991,722.69
Georgia	9,394,644.30	7,518.68	9,402,162.98
Idaho	36,675,397.09	1,987,664.78	38,663,061.87
Indiana	40.13	.....	40.13
Iowa	115.59	58.85	174.44
Maine	6,311.06	23.39	6,334.45
Maryland	20,328.78	41.58	20,370.36
Massachusetts	.....	917.56	917.56
Michigan	469,091.82	4,129,193.60	4,598,285.42
Minnesota	5,664.74	73.00	5,737.74
Missouri	96.71	359.11	455.82
Montana	76,400,800.31	22,128,651.43	98,529,451.74
Nebraska	2,497.23	22.84	2,520.07
Nevada	35,391,690.12	104,477,223.35	139,868,913.47
New Hampshire	11,501.89	1.74	11,503.63
New Mexico	6,426,883.55	7,415,760.84	13,842,644.39
North Carolina	11,853,508.43	60,377.83	11,913,886.26
Oregon	22,757,035.54	103,983.44	22,861,018.98
Pennsylvania	1,138.34	2,588.47	3,726.81
South Carolina	2,490,920.29	4,639.03	2,495,559.32
South Dakota	55,762,444.07	1,108,399.93	56,870,844.00
Tennessee	91,425.52	16.82	91,442.34
Texas	8,239.06	5,847.50	14,086.56
Utah	1,716,345.08	19,929,247.35	21,645,592.43
Vermont	86,560.25	56.82	86,617.07
Virginia	1,765,908.80	497.92	1,766,406.72
Washington	1,154,762.57	16,700.60	1,171,463.17
Wisconsin	325.73	7.02	332.75
Wyoming	880,929,86	13,473.18	894,403.04
Other sources	42,128,761.59	42,985,926.39	85,114,687.98
Total unrefined	1,159,963,240.88	247,640,936.64	1,407,604,177.52
Refined	502,750,598.78	536,358,671.03	1,039,109,269.81
Total bullion deposited	1,662,713,839.66	783,999,607.67	2,446,713,447.33

XXXVII.—Product of Gold and Silver in the United States from 1792 to 1844, and Annually Since.

[The estimate for 1792–1873 is by R. W. Raymond, commissioner, and since by Director of the Mint.]

Year.	Gold.	Silver.	Total.
April 2, 1792–July 31, 1834	$14,000,000	Insignificant.	$14,000,000
July 31, 1834–December 31, 1844	7,500,000	$250,000	7,750,000
1845	1,008,327	50,000	1,058,327
1846	1,139,357	50,000	1,189,357
1847	889,085	50,000	939,085
1848	10,000,000	50,000	10,050,000
1849	40,000,000	50,000	40,050,000
1850	50,000,000	50,000	50,050,000
1851	55,000,000	50,000	55,050,000
1852	60,000,000	50,000	60,050,000
1853	65,000,000	50,000	65,050,000
1854	60,000,000	50,000	60,050,000
1855	55,000,000	50,000	55,050,000
1856	55,000,000	50,000	55,050,000
1857	55,000,000	50,000	55,050,000
1858	50,000,000	500,000	50,500,000
1859	50,000,000	100,000	50,100,000
1860	46,000,000	150,000	46,150,000
1861	43,000,000	2,000,000	45,000,000
1862	39,200,000	4,500,000	43,700,000
1863	40,000,000	8,500,000	48,500,000
1864	46,100,000	11,000,000	57,100,000
1865	53,225,000	11,250,000	64,475,000
1866	53,500,000	10,000,000	63,500,000
1867	51,725,000	13,500,000	65,225,000
1868	48,000,000	12,000,000	60,000,000
1869	49,500,000	12,000,000	61,500,000
1870	50,000,000	16,000,000	66,000,000
1871	43,500,000	23,000,000	66,500,000
1872	36,000,000	28,750,000	64,750,000
1873	36,000,000	35,750,000	71,750,000
1874	33,500,000	37,300,000	70,800,000
1875	33,400,000	31,700,000	65,100,000
1876	39,900,000	38,800,000	78,700,000
1877	46,900,000	39,800,000	86,700,000
1878	51,200,000	45,200,000	96,400,000
1879	38,900,000	40,800,000	79,700,000
1880	36,000,000	39,200,000	75,200,000
1881	34,700,000	43,000,000	77,700,000
1882	32,500,000	46,800,000	79,300,000
1883	30,000,000	46,200,000	76,200,000
1884	30,800,000	48,800,000	79,600,000
1885	31,800,000	51,600,000	83,400,000
1886	35,000,000	51,000,000	86,000,000
1887	33,000,000	53,350,000	86,350,000
1888	33,175,000	59,195,000	92,370,000
1889	32,800,000	64,646,000	97,446,000
1890	32,845,000	70,465,000	103,310,000
1891	33,175,000	75,417,000	108,592,000
1892	33,000,000	82,101,000	115,101,000
1893	35,955,000	77,576,000	113,531,000
1894	39,500,000	64,000,000	103,500,000
1895	46,610,000	72,051,000	118,661,000
Total	2,059,946,769	1,368,901,000	3,428,847,769

XXXVIII.—Coinage of Nations.

Countries.	1893.		1894.		1895.	
	Gold.	Silver.	Gold.	Silver.	Gold.	Silver.
United States	$56,997,020	$8,802,797	$79,546,160	$9,200,351	$59,616,358	$5,698,010
Mexico	493,167	28,005,396	554,107	29,481,033	504,193	24,832,351
Great Britain	45,094,210	5,296,728	27,633,807	4,002,657	18,547,229	5,776,584
Australasia	32,059,354	.....	35,203,648	.....	33,695,008	.....
India *a*	.....	39,544,591	.....	2,288,504	.....	4,044,935
France	9,832,068	.....	1,897,395	772,000	20,845,337	1,544,000
Germany	26,280,188	2,093,713	37,433,154	1,067,945	25,588,334	1,826,038
Russia *b*	2,315,493	2,499,874	2,315,481	233,861	38,590,432	3,696,192
Finland	.....	.....	.....	41,365	.....	.....
Austria-Hungary *c*	55,867,730	18,468,664	40,395,456	10,742,232	18,208,728	9,056,188
Italy	159,086	.....	.....	.....	.....	.....
Spain	.....	3,290,591	.....	3,946,225	.....	205,649
Japan	1,306,070	12,300,705	1,576,440	24,131,363	1,515,000	23,883,505
Portugal	.....	1,412,640	.....	478,440	.....	119,880
Netherlands	.....	562,800	70,897	160,800	135,692	140,700
Norway	.....	134,000	.....	120,600	.....	80,400
Sweden	.....	26,171	165,239	46,443	896,921	.....
Denmark	.....	.....	.....	121,593	.....	.....
Switzerland	386,000	.....	465,516	579,000	772,000	44,390
Turkey	736,989	874,628	84,403	450,018	3,420,717	414,483
Egypt	622,818	537,114	.....	.....	.....	.....
Abyssinia	.....	.....	.....	30,759	.....	.....
Persia	136,320	255,600	.....	.....	.....	.....
Hongkong	.....	1,500,000	.....	2,100,000	.....	2,200,000
China	.....	4,249,960	.....	6,000,000	.....	8,253,340
Indo-China	.....	939,906	.....	1,532,087	.....	6,092,709
Tunis	134,004	347	232	347	232	347
Canada	.....	160,000	.....	144,518	.....	.....
Newfoundland	.....	.....	.....	58,000	.....	.....
Costa Rica	.....	155,000	.....	12,517	.....	.....
Haiti	.....	.....	.....	718,753	.....	730,285
Bolivia	.....	1,569,229	.....	.....	.....	.....
Peru	.....	2,167,393	.....	4,360,153	.....	4,073,270
Colombia	.....	34,530	.....	8,252	.....	.....
Ecuador	.....	.....	.....	83,308	.....	1,102,073
Venezuela	.....	193,000	.....	193,000	.....	.....
Chile	.....	481,405	.....	121,779	8,353,212	4,243,919
Uruguay	.....	1,000,110	.....	.....	.....	1,000,000
Guatemala	.....	100,000	.....	3,561,988	145	500,000
British Honduras	.....	.....	.....	50,000	.....	30,000
British West Indies	.....	.....	.....	9,733	.....	.....
Puerto Rico	.....	.....	.....	.....	.....	8,389,222
German East Africa	.....	45,348	.....	93,097	.....	.....
German New Guinea	.....	.....	.....	47,608	11,900	.....
Monaco	.....	.....	.....	.....	386,000	.....
Straits Settlements	.....	194,000	.....	306,000	.....	450,446
Congo State	.....	.....	.....	96,500	.....	.....
Morocco	.....	557,750	.....	327,337	.....	354,630
Bulgaria	.....	.....	579,097	2,316,224	.....	.....
Roumania	.....	.....	.....	579,000	.....	.....
Ceylon	.....	473,700	.....	142,110	.....	236,850
Siam	.....	.....	.....	2,338,288	.....	2,589,823
Korea	.....	25,000	.....	.....	.....	.....
Total	232,420,517	137,952,690	227,921,032	113,095,788	231,087,438	121,610,219

a Rupee calculated at coining rate, $0.4737. *b* Silver ruble calculated at coining rate, $0.7718.
c Florin calculated at coining rate, $0.4052, under the coinage act of August 2, 1892.

XXXIX.—WORLD'S PRODUCTION OF GOLD AND

[Kilogram of gold, $664.60; kilogram of silver, $41.56,

	Countries.	1893.			
		Gold.		Silver.	
		Kilograms.	*Dollars.*	*Kilograms.*	*Dollars.*
1	United States	54,100	35,955,000	1,866,595	77,575,700
2	Australasia	53,698	35,688,600	637,800	26,507,000
3	Mexico	1,964	1,305,300	1,380,116	57,357,600
	European countries:				
4	Russia	41,842	27,808,200	10,117	420,500
5	Germany	*b* 2,305	1,531,900	179,000	7,439,200
6	Austria-Hungary	2,521	1,675,400	90,132	3,745,900
7	Sweden	93	62,000	4,471	185,800
8	Norway	.....	.....	*c* 4,495	186,800
9	Italy	176	117,000	28,885	1,200,500
10	Spain	.....	.....	62,632	2,603,000
11	Greece	.....	.....	2,025	84,200
12	Turkey	10	7,000	6,334	263,200
13	France	279	185,300	98,077	4,076,100
14	Great Britain	64	42,300	7,886	327,700
15	Dominion of Canada	*a* 1,395	927,200	*a* 7,734	321,400
	South American countries:				
16	Argentina	211	140,200	22,026	915,400
17	Colombia	4,353	2,892,800	52,511	2,182,400
18	Bolivia	101	*a* 67,000	424,074	17,624,500
19	Ecuador	79	52,000	240	10,000
20	Chile	698	464,400	97,333	4,045,200
21	Brazil	3,339	2,219,500	.....	.....
22	Venezuela	*c* 1,213	806,100	.....	.....
23	Guiana (British)	3,863	2,567,400	.....	.....
24	Guiana (Dutch)	*a* 1,065	707,800	.....	.....
25	Guiana (French)	1,764	1,172,400	.....	.....
26	Peru	*f* 110	73,000	*e* 59,257	2,462,700
27	Uruguay	*a* 213	141,600	.....	.....
28	Central American States	*f* 246	163,500	48,123	*g* 2,000,000
29	Japan	*h* 728	484,000	*h* 57,978	2,409,600
30	China	10,372	*a* 6,892,900	.....	.....
31	Africa	43,550	28,943,500	.....	.....
32	India (British)	5,738	3,813,600	.....	.....
33	Korea	884	587,900	.....	.....
	Total	236,974	157,494,800	5,147,841	213,944,400

a Estimate of the Bureau of the Mint.

b Gold separated from silver in Germany, whose gold contents do not figure in the statistics of any other country.

c Estimated the same as officially communicated for 1892.

d Estimated the same as officially communicated for 1893.

e Estimated the same as officially communicated for 1894.

SILVER FOR CALENDAR YEARS 1893, 1894, AND 1895.

coining rate in United States silver dollars.]

1894.				1895.				
Gold.		Silver.		Gold.		Silver.		
Kilograms.	*Dollars.*	*Kilograms.*	*Dollars.*	*Kilograms.*	*Dollars.*	*Kilograms.*	*Dollars.*	
59,434	39,500,000	1,539,942	64,000,000	70,132	46,610,000	1,733,662	72,051,000	1
62,836	41,760,800	562,263	23,367,700	67,406	44,798,300	389,102	16,171,100	2
6,771	*a* 4,500,000	1,463,361	60,817,300	9,028	*a* 6,000,000	1,461,008	60,719,500	3
36,313	24,133,400	8,580	356,600	43,476	28,894,400	12,495	519,300	4
b 3,100	2,060,300	193,000	8,021,100	*b* 3,345	2,223,100	181,000	7,522,400	5
2,719	1,807,200	83,515	3,470,900	2,993	1,989,000	67,952	2,824,100	6
49	62,500	2,869	119,200	79	52,500	1,187	49,300	7
.....	.....	4,705	195,500	.....	.....	6,082	252,800	8
d 176	117,000	*d* 28,885	1,200,500	*d* 176	117,000	*d* 28,885	1,200,500	9
.....	.....	63,605	2,643,400	.....	.....	109,804	4,563,500	10
.....	.....	35,436	1,472,700	.....	.....	*e* 35,436	1,472,700	11
12	8,000	1,516	63,000	*e* 12	8,000	*e* 1,516	63,000	12
.....	.....	26,167	1,087,500	.....	.....	*e* 26,167	1,087,500	13
99	65,800	7,932	329,700	161	107,000	8,722	362,500	14
1,568	1,042,100	26,371	1,096,000	2,875	1,910,900	55,241	2,295,800	15
143	95,000	37,334	1,551,600	474	315,000	10,210	424,300	16
d 4,353	2,892,800	*d* 52,511	2,182,400	*d* 4,353	2,892,800	*d* 52,511	2,182,400	17
101	*a* 67,000	684,418	28,444,400	101	*a* 67,000	*e* 684,418	28,444,400	18
103	68,400	*d* 240	10,000	*e* 103	68,400	*d* 240	10,000	19
698	*d* 464,400	• 88,680	3,685,500	2,118	1,407,600	156,542	6,505,900	20
3,339	2,219,500	.....	.....	*e* 3,339	2,219,500	.....	.....	21
1,368	909,500	.....	.....	*e* 1,368	909,500	.....	.....	22
3,476	2,310,100	.....	.....	3,330	2,213,100	.....	.....	23
979	*a* 650,800	.....	.....	734	487,800	.....	.....	24
3,920	2,605,200	.....	.....	*e* 3,920	2,605,200	.....	.....	25
112	74,400	100,695	4,184,900	96	63,800	98,401	4,089,500	26
a 23	15,400	.....	.....	41	27,200	.....	.....	27
708	470,500	48,123	*g* 2,000,000	*e* 708	470,500	48,123	*g* 2,000,000	28
i 737	489,800	*i* 60,869	2,529,700	*j* 778	517,100	*j* 67,355	2,799,300	29
12,875	*a* 8,556,800	.....	.....	5,298	*a* 3,521,000	.....	.....	30
60,595	40,271,000	.....	.....	67,040	44,554,900	.....	.....	31
5,842	3,882,900	.....	.....	7,006	4,656,200	.....	.....	32
703	467,200	.....	.....	1,052	699,200	.....	.....	33
273,197	181,567,800	5,121,017	212,829,600	301,542	200,406,000	5,236,059	217,610,800	

f Estimated the same as officially communicated for 1891.
g Estimated the same as officially communicated for 1887.
h Product of Imperial mines, 1893; private mines, 1891.
i Product of Imperial mines, 1894; private mines, 1892.
j Product of Imperial mines, 1895; private mines, 1893.

XL.—World's Production of Gold and

[Fine ounce of gold, $20.671834+; fine ounce of silver,

	Countries.	1893.			
		Gold.		Silver.	
		Ozs. fine.	*Dollars.*	*Ozs. fine.*	*Dollars.*
1	United States	1,739,323	35,955,000	59,999,956	77,575,700
2	Australasia	1,726,436	35,688,600	20,501,508	26,507,000
3	Mexico	63,144	1,305,300	44,362,519	57,357,600
	European countries:				
4	Russia	1,345,222	27,808,200	325,230	420,500
5	Germany	*b* 74,106	1,531,900	5,753,756	7,439,200
6	Austria-Hungary	81,047	1,675,400	2,897,219	3,745,900
7	Sweden	2,999	62,000	143,705	185,800
8	Norway	.....	.....	*c* 144,478	186,800
9	Italy	5,660	117,000	928,512	1,200,500
10	Spain	.....	.....	2,013,258	2,603,000
11	Greece	.....	.....	65,123	84,200
12	Turkey	339	7,000	203,569	263,200
13	France	8,964	185,300	3,152,609	4,076,100
14	Great Britain	2,046	42,300	253,455	327,700
15	Dominion of Canada	*a* 44,853	927,200	*a* 248,583	321,400
	South American countries:				
16	Argentina	6,782	140,200	708,005	915,400
17	Colombia	139,939	2,892,800	1,687,950	2,182,400
18	Bolivia	3,241	*a* 67,000	13,631,449	17,624,500
19	Ecuador	2,515	52,000	7,734	10,000
20	Chile	22,466	464,400	3,128,709	4,045,200
21	Brazil	107,368	2,219,500	.....	.....
22	Venezuela	*c* 38,995	806,100	.....	.....
23	Guiana (British)	124,198	2,567,400	.....	.....
24	Guiana (Dutch)	*a* 34,240	707,800	.....	.....
25	Guiana (French)	56,715	1,172,400	.....	.....
26	Peru	*f* 3,531	73,000	*c* 1,904,744	2,462,700
27	Uruguay	*a* 6,850	141,600	.....	.....
28	Central American States	*f* 7,909	163,500	1,546,875	*g* 2,000,000
29	Japan	*h* 23,414	484,000	*h* 1,863,675	2,409,600
30	China	333,444	*a* 6,892,900	.....	.....
31	Africa	1,400,142	28,943,500	.....	.....
32	India (British)	184,483	3,813,600	.....	.....
33	Korea	28,440	587,900	.....	.....
	Total	7,618,811	157,494,800	165,472,621	213,944,400

a Estimate of the Bureau of the Mint.

b Gold separated from silver in Germany, whose gold contents do not figure in the statistics of any other country.

c Estimated the same as officially communicated for 1892.

d Estimated the same as officially communicated for 1893.

e Estimated the same as officially communicated for 1894.

SILVER FOR CALENDAR YEARS 1893, 1894, AND 1895.

$1.292929+, coining rate in United States silver dollars.]

1894.				1895.				
Gold.		Silver.		Gold.		Silver.		
Ozs. fine.	*Dollars.*	*Ozs. fine*	*Dollars.*	*Ozs. fine.*	*Dollars.*	*Ozs. fine.*	*Dollars.*	
1,910,813	39,500,000	49,500,500	64,000,000	2,254,760	46,610,000	55,726,945	72,051,000	1
2,020,179	41,760,800	18,073,455	23,367,700	2,167,118	44,798,300	12,507,335	16,171,100	2
217,688	a 4,500,000	47,038,381	60,817,300	290,250	a 6,000,000	46,962,738	60,719,500	3
1,167,453	24,133,400	275,808	356,600	1,397,767	28,894,400	401,646	519,300	4
b 99,667	2,060,300	6,203,820	8,021,100	b 107,542	2,223,100	5,818,106	7,522,400	5
87,423	1,807,200	2,684,524	3,470,900	96,218	1,989,000	2,184,265	2,824,100	6
3,024	62,500	92,194	119,200	2,540	52,500	38,130	49,300	7
.....	.....	151,207	195,500	.....	.....	195,525	252,800	8
d 5,660	117,000	d 928,512	1,200,500	d 5,660	117,000	d 928,512	1,200,500	9
.....	.....	2,044,505	2,643,400	.....	.....	3,529,582	4,563,500	10
.....	.....	1,139,041	1,472,700	.....	.....	e 1,139,041	1,472,700	11
387	8,000	48,727	63,000	e 387	8,000	e 48,727	63,000	12
.....	.....	841,113	1,087,500	.....	.....	e 841,113	1,087,500	13
3,183	65,800	255,002	329,700	5,176	107,000	280,371	362,500	14
50,411	1,042,100	847,687	1,096,000	92,440	1,910,900	1,775,658	2,295,800	15
4,596	95,000	1,200,066	1,551,600	15,238	315,000	328,170	424,300	16
d 139,939	2,892,800	d 1,687,950	2,182,400	d 139,939	2,892,800	d 1,687,950	2,182,400	17
3,241	a 67,000	21,999,966	28,444,400	3,241	a 67,000	e 21,999,966	28,444,400	18
3,309	68,400	d 7,734	10,000	e 3,302	68,400	d 7,734	10,000	19
22,466	d 464,400	2,850,503	3,685,500	68,092	1,407,600	5,031,907	6,505,900	20
107,368	2,219,500	.....	.....	e 107,368	2,219,500	.....	.....	21
43,997	909,500	.....	.....	e 43,997	909,500	.....	.....	22
111,751	2,310,100	.....	.....	107,059	2,213,100	.....	.....	23
a 31,482	650,800	.....	.....	23,597	487,800	.....	.....	24
126,026	2,605,200	.....	.....	e 126,026	2,605,200	.....	.....	25
3,599	74,400	3,236,759	4,184,900	3,086	63,800	3,162,973	4,089,500	26
745	15,400	.....	.....	1,316	27,200	.....	.....	27
22,760	470,500	1,546,875	g 2,000,000	e 22,760	470,500	1,546,875	g 2,000,000	28
i 23,694	489,800	i 1,956,565	2,529,700	j 25,015	517,100	j 2,165,084	2,799,300	29
412,937	a 8,556,800	.....	.....	170,328	a 3,521,000	.....	.....	30
1,948,100	40,271,000	.....	.....	2,155,343	44,554,900	.....	.....	31
187,835	3,882,900	.....	.....	225,244	4,656,200	.....	.....	32
22,600	467,200	.....	.....	33,824	699,200	.....	.....	33
8,783,342	181,567,800	164,610,394	212,829,600	9,694,640	200,406,000	168,308,353	217,610,800	

f Estimated the same as officially communicated for 1891.
g Estimated the same as officially communicated for 1887.
h Product of Imperial mines, 1893; private mines, 1891.
i Product of Imperial mines, 1894; private mines, 1892.
j Product of Imperial mines, 1895; private mines, 1893.

XLI.—PRODUCTION OF GOLD AND SILVER IN

[From 1493 to 1885 is from a table of averages for certain periods, compiled by Dr. Adolph Soetbeer.

	Period.	GOLD.			
		Annual average for period.		Total for period.	
		Fine ounces.	Value.	Fine ounces.	Value.
1	1493–1520	186,470	$3,855,000	5,221,160	$107,931,000
2	1521–1544	230,194	4,759,000	5,524,656	114,205,000
3	1545–1560	273,596	5,656,000	4,377,544	90,492,000
4	1561–1580	219,906	4.546,000	4,398,120	90,917,000
5	1581–1600	237,267	4,905,000	4,745,340	98,095,000
6	1601–1620	273,918	5,662,000	5,478,360	113,248,000
7	1621–1640	266,845	5,516,000	5,336,900	110,324,000
8	1641–1660	281,955	5,828,000	5,639,110	116,571,000
9	1661–1680	297,709	6,154,000	5,954,180	123,084,000
10	1681–1700	346,095	7,154,000	6,921,895	143,088,000
11	1701–1720	412,163	8,520,000	8,243,260	170,403,000
12	1721–1740	613,422	12,681,000	12,268,440	253,611,000
13	1741–1760	791,211	16,356,000	15,824,230	327,116,000
14	1761–1780	665,666	13,761,000	13,313,315	275,211,000
15	1781–1800	571,948	11,823,000	11,438,970	236,464,000
16	1801–1810	571,563	11,815,000	5,715,627	118,152,000
17	1811–1820	367,957	7,606,000	3,679,568	76,063,000
18	1821–1830	457,044	9,448,000	4,570,444	94,479,000
19	1831 1840	652,291	13,484,000	6,522,913	134,841,000
20	1841–1850	1,760,502	36,393,000	17,605,018	363,928,000
21	1851–1855	6,410,324	132,513,000	32,051,621	662,566,000
22	1856–1860	6,486,262	134,083,000	32,431,312	670,415,000
23	1861–1865	5,949,582	122,989,000	29,747,913	614,944,000
24	1866–1870	6,270,086	129,614,000	31,350,430	648,071,000
25	1871–1875	5,591,014	115,577,000	27,955,068	577,883,000
26	1876–1880	5,543,110	114,586,000	27,715,550	572,931,000
27	1881–1885	4,794,755	99,116,000	23,973,773	495,582,000
28	1886	5,135,679	106,163,900	5,135,679	106,163,900
29	1887	5,116,861	105,774,900	5,116,861	105,774,900
30	1888	5,330,775	110,196,900	5,330,775	110,196,900
31	1889	5,973,790	123,489,200	5,973,790	123,489,200
32	1890	5,749,306	118,848,700	5,749,306	118,848,700
33	1891	6,320,194	130,650,000	6,320,194	130,650,000
34	1892	7,094,266	146,651,500	7,094,266	146,651,500
35	1893	7,618,811	157,494,800	7,618,811	157,494,800
36	1894	8,783,342	181,567,800	8,783,342	181,567,800
37	1895	9,694,640	200,406,000	9,694,640	200,406,000
	Total			424,822,381	8,781,858,700

THE WORLD SINCE THE DISCOVERY OF AMERICA.

For the years 1886 to 1895 the production is the annual estimate of the Bureau of the Mint.]

SILVER.				PERCENTAGE OF PRODUCTION.				
Annual average for period.		Total for period.		By weight.		By value.		
Fine ounces.	Coining value.	Fine ounces.	Coining value.	Gold.	Silver.	Gold.	Silver.	
1,511,050	$1,954,000	42,309,400	$54,703,000	11	89	66.4	33.6	1
2,899,930	3,749,000	69,598,320	89,986,000	7.4	92.6	55.9	44.1	2
10,017,940	12,952,000	160,287,040	207,240,000	2.7	97.3	30.4	69.6	3
9,628,925	12,450,000	192,578,500	248,990,000	2.2	97.8	26.7	73.3	4
13,467,635	17,413,000	269,352,700	348,254,000	1.7	98.3	22	78	5
13,596,235	17,579,000	271,924,700	351,579,000	2	98	24.4	75.6	6
12,654,240	16,361,000	253,084,800	327,221,000	2.1	97.9	25.2	74.8	7
11,776,545	15,226,000	235,530,900	304,525,000	2.3	97.7	27.7	72.3	8
10,834,550	14,008,000	216,691,000	280,166,000	2.7	97.3	30.5	69.5	9
10,992,085	14,212,000	219,841,700	284,240,000	3.1	96.9	33.5	66.5	10
11,432,540	14,781,000	228,650,800	295,629,000	3.5	96.5	36.6	63.4	11
13,863,080	17,924,000	277,261,600	358,480,000	4.2	95.8	41.4	58.6	12
17,140,612	22,162,000	342,812,235	443,232,000	4.4	95.6	42.5	57.5	13
20,985,591	27,133,000	419,711,820	542,658,000	3.1	96.9	33.7	66.3	14
28,261,779	36,540,000	565,235,580	730,810,000	2	98	24.4	75.6	15
28,746,922	37,168,000	287,469,225	371,677,000	1.9	98.1	24.1	75.9	16
17,385,755	22,479,000	173,857,555	224,780,000	2.1	97.9	25.3	74.7	17
14,807,004	19,144,000	148,070,040	191,444,000	3	97	33	67	18
19,175,867	24,703,000	191,758,675	247,930,000	3.3	96.7	35.2	64.8	19
25,090,342	32,440,000	250,903,422	324,400,000	6.6	93.4	52.9	47.1	20
28,488,597	36,824,000	142,442,986	184,169,000	18.4	81.6	78.3	21.7	21
29,095,428	37,618,000	145,477,142	188,092,000	18.2	81.8	78.1	21.9	22
35,401,972	45,772,000	177,009,862	228,861,000	14.4	85.6	72.9	27.1	23
43,051,583	55,663,000	215,257,914	278,313,000	12.7	87.3	70	30	24
63,317,014	81,864,000	316,585,069	409,322,000	8.1	91.9	58.5	41.5	25
78,775,602	101,851,000	393,878,009	509,256,000	6.6	93.4	53	47	26
92,003,944	118,955,000	460,019,722	594,773,000	5	95	45.5	54.5	27
93,297,290	120,626,800	93,297,290	120,626,800	5.2	94.8	46.8	53.2	28
96,123,586	124,281,000	96,123,586	124,281,000	5	95	45.9	54.1	29
108,827,606	140,706,400	108,827,606	140,706,400	4.6	95.4	43.9	56.1	30
120,213,611	155,427,700	120,213,611	155,427,700	4.7	95.3	44.3	55.7	31
126,095,062	163,032,000	126,095,062	163,032,000	4.3	95.7	42.1	57.9	32
137,170,919	177,352,300	137,170,919	177,352,300	4.4	95.6	42.4	57.6	33
153,151,762	198,014,400	153,151,762	198,014,400	4.4	95.6	42.5	57.5	34
165,472,621	213,944,400	165,472,621	213,944,400	4.4	95.6	42.4	57.6	35
164,611,394	212,829,600	164,610,394	212,829,600	5	95	46.3	53.7	36
168,308,353	217,610,800	168,308,353	217,610,800	5.4	94.6	47.7	52.3	37
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XLII.—HIGHEST, LOWEST, AND AVERAGE PRICE OF SILVER BULLION, AND VALUE OF AN OUNCE FINE, BULLION VALUE OF A UNITED STATES SILVER DOLLAR, AND COMMERCIAL RATIO OF SILVER TO GOLD, FROM JULY 1, 1873, TO JUNE 30, 1896.

Fiscal year.	Highest.	Lowest.	Average London price per ounce standard, 0.925.	Equivalent value of ounce fine with exchange at par, $4.8665.	Equivalent value of ounce fine based on average price of exchange.	Bullion value of a United States silver dollar at average price of silver, exchange at par.	Commercial ratio of silver to gold.
1873.	*Pence.*	*Pence.*	*Pence.*				
July	59⅞	59 5/16	59.344	$1.30089	$1.29982	$1.00824	15.89
August	59 3/16	58 13/16	59.000	1.29332	1.28186	1.00030	15.98
September	59⅛	58 13/16	58.968	1.29247	1.27864	.99964	15.99
October	59	58½	58.750	1.28786	1.26069	.99607	16.05
November	58⅛	57⅞	58.000	1.27142	1.23981	.98336	16.25
December	58 1/16	58	58.036	1.27031	1.26136	.98250	16.27
1874.							
January	59⅛	58	58.750	1.28786	1.28795	.99607	16.05
February	59	58½	58.750	1.28786	1.28954	.99607	16.05
March	59⅜	58½	58.937	1.29196	1.29422	.99925	16.00
April	59¼	58 5/16	58.906	1.29579	1.29619	1.00221	15.95
May	58⅞	58½	58.687	1.28648	1.29798	.99524	16.06
June	59	58½	58.750	1.28786	1.29805	.99607	16.05
Average	*a* 59⅛	*a* 57⅞	58.739	1.28784	1.28217	.99458	16.05
July	58½	58½	58.375	1.27964	1.28793	.98972	16.15
August	58⅛	57⅞	58.000	1.27142	1.28018	.98336	16.25
September	58	57⅞	57.687	1.26456	1.26671	.97805	16.34
October	57 13/16	57⅝	57.718	1.26524	1.26807	.97858	16.33
November	58¼	57⅞	58.000	1.27142	1.27756	.98336	16.25
December	57⅞	57¼	57.500	1.26046	1.26836	.97488	16.40
1875.							
January	57⅝	57½	57.562	1.26182	1.27243	.97593	16.38
February	57½	57⅜	57.437	1.25902	1.26050	.97377	16.41
March	57¼	57	57.125	1.27690	1.24800	.98760	16.18
April	57⅜	57⅛	57.250	1.25498	1.26104	.97064	16.47
May	57	56⅞	56.562	1.23990	1.24844	.95898	16.67
June	55⅞	55⅛	55.687	1.22072	1.22975	.94415	16.77
Average	*a* 58⅛	*a* 55⅛	57.408	1.26050	1.26408	.97491	16.38
July	55⅞	55 13/16	55.781	1.22278	1.22868	.94576	16.90
August	56⅝	56	56.312	1.23442	1.24038	.95474	16.74
September	56¾	56 13/16	56.218	1.23236	1.22368	.95315	16.77
October	57⅛	56¾	56.987	1.24922	1.23856	.96619	16.54
November	56 15/16	56⅝	56.781	1.24470	1.24304	.96269	16.60
December	56⅝	56⅛	56.375	1.23580	1.24151	.95581	16.72
1876.							
January	56⅛	54⅞	55.500	1.21662	1.22175	.94097	16.99
February	54⅞	53	53.937	1.18236	1.18356	.91448	17.48
March	54¼	52⅛	53.375	1.17004	1.17809	.90495	17.60
April	54	53⅛	53.750	1.17826	1.18395	.91131	17.54
May	54	52	53.000	1.16182	1.16981	.89859	17.79
June	52	50	51.000	1.11797	1.12567	.86447	18.49
Average	*a* 57⅛	*a* 50	54.917	1.20386	1.20655	.93109	17.18

a Denotes highest and lowest for each year.

HIGHEST, LOWEST, AND AVERAGE PRICE OF SILVER BULLION, AND VALUE OF AN OUNCE FINE, ETC.—Continued.

Fiscal year.	Highest.	Lowest.	Average London price per ounce standard, 0.925.	Equivalent value of ounce fine with exchange at par, $4.8665.	Equivalent value of ounce fine based on average price of exchange.	Bullion value of a United States silver dollar at average price of silver, exchange at par.	Commercial ratio of silver to gold.
1876.	*Pence.*	*Pence.*	*Pence.*				
July	51 1/4	46 3/4	49.125	$1.07687	$1.08429	$0.83277	19.19
August	53 3/4	50 1/4	52.000	1.13990	1.14634	.88184	18.13
September	52 9/16	51 1/8	51.843	1.13936	1.13372	.88122	18.14
October	53 5/8	52	52.812	1.15770	1.15258	.89540	17.85
November	55	53 1/8	54.062	1.19733	1.17860	.92605	17.26
December	58 1/8	55 1/4	56.875	1.24676	1.24100	.96429	16.58
1877.							
January	58 1/4	56 7/8	57.567	1.26193	1.25843	.97602	16.38
February	57 3/4	56	56.875	1.24676	1.24356	.96429	16.58
March	56 1/8	53 1/4	54.687	1.19880	1.19473	.92928	17.24
April	55	53 1/2	54.250	1.19012	1.19374	.92048	17.36
May	54 5/8	53 5/8	54.125	1.18648	1.19485	.91766	17.42
June	54	53 1/2	53.750	1.17826	1.18637	.91131	17.54
Average	*a* 58 1/8	*a* 46 3/4	53.997	1.18502	1.18401	.91671	17.47
July	54 1/2	53 7/8	54.187	1.18782	1.19260	.91870	17.40
August	54 1/4	54	54.125	1.18648	1.18538	.91766	17.42
September	55 1/4	54 1/4	54.750	1.20018	1.20005	.92826	17.22
October	55 5/8	54 5/8	55.125	1.20840	1.20604	.93462	17.10
November	55	54	54.500	1.19470	1.19065	.92402	17.30
December	54 1/4	53 3/4	54.000	1.18372	1.18649	.91553	17.46
1878.							
January	54	53 1/2	53.750	1.17826	1.17426	.91131	17.54
February	55 1/4	53 15/16	54.593	1.19672	1.19219	.92558	17.27
March	55	54 1/8	54.562	1.19606	1.19987	.92507	17.28
April	54 1/4	53 7/8	54.062	1.18510	1.19228	.91660	17.44
May	53 7/8	53 1/4	53.562	1.17405	1.17812	.90805	17.60
June	53 7/16	52 1/2	52.968	1.16112	1.16314	.89805	17.80
Average	*a* 55 5/8	*a* 52 1/2	54.182	1.18780	1.18842	.91862	17.40
July	52 13/16	52 5/16	52.562	1.15222	1.15304	.89117	17.94
August	52 3/4	52 1/8	52.437	1.14948	1.15385	.88905	17.98
September	52 1/8	51 1/2	51.812	1.13577	1.13659	.87844	18.20
October	51 9/16	49 1/2	50.531	1.10769	1.10621	.85672	18.66
November	50 3/4	50 3/8	50.562	1.10837	1.10917	.85725	18.65
December	50 1/16	49 1/2	50.093	1.09809	1.10069	.84930	18.82
1879.							
January	51	49 5/8	50.031	1.09673	1.10054	.84825	18.84
February	50 1/2	49 1/2	49.875	1.09331	1.09837	.84560	18.90
March	50 1/4	48 7/8	49.562	1.08645	1.09272	.84030	19.02
April	50 1/8	49 1/2	49.812	1.09193	1.09631	.84458	18.92
May	51 3/4	50	50.875	1.11526	1.12131	.86258	18.53
June	53	51 1/8	52.250	1.14538	1.15303	.88587	18.04
Average	*a* 53	*a* 48 7/8	50.866	1.11505	1.11848	.86242	18.54

a Denotes highest and lowest for each year.

HIGHEST, LOWEST, AND AVERAGE PRICE OF SILVER BULLION, AND VALUE OF AN OUNCE FINE, ETC.—Continued.

Fiscal year.	Highest.	Lowest.	Average London price per ounce standard, 0.925.	Equivalent value of ounce fine with exchange at par, $4.8665.	Equivalent value of ounce fine based on average price of exchange.	Bullion value of a United States silver dollar at average price of silver, exchange at par.	Commercial ratio of silver to gold.
1879.	*Pence.*	*Pence.*	*Pence.*				
July	52 1/8	51 1/8	51.685	$1.13167	$1.13412	$0.87597	18.26
August	51 13/16	52 1/8	51.601	1.13030	1.12534	.87421	18.28
September	51 1/2	51 1/8	51.3125	1.13030	1.12439	.87421	18.28
October	53 1/4	51 3/16	52.271	1.14674	1.13980	.88693	18.02
November	53 1/4	53	53.386	1.17003	1.16319	.90494	17.66
December	53	52 3/8	52.5975	1.15222	1.14761	.89117	17.94
1880.							
January	52 3/4	52 5/16	52.480	1.15085	1.14700	.89011	17.96
February	52 9/16	52	52.326	1.14674	1.14594	.88693	18.02
March	52 1/8	51 3/4	51.995	1.14126	1.14511	.88269	18.11
April	52 1/4	51 3/4	51.975	1.13989	1.14953	.88163	18.13
May	52 1/4	52 1/16	52.131	1.14126	1.14726	.88269	18.11
June	52 3/4	52 1/16	52.454	1.15085	1.15712	.89011	17.96
Average	*a* 53 1/2	*a* 51 1/8	52.218	1.14436	1.14397	.88509	18.06
July	52 13/16	52 1/4	52.687	1.15496	1.15348	.89328	17.90
August	52 1/8	52 1/8	52.635	1.14400	1.14873	.88481	18.06
September	52 9/16	52 1/8	52.437	1.14674	1.14246	.88901	18.02
October	52 5/16	51 7/8	52.143	1.14400	1.13798	.88481	18.06
November	51 13/16	51 5/8	51.75	1.13441	1.12698	.87739	18.21
December	52	51 1/2	51.82	1.13578	1.12669	.87845	18.20
1881.							
January	51 5/8	51	51.28	1.12345	1.11821	.86891	18.40
February	52 7/8	51 1/4	51.41	1.13578	1.13407	.87845	18.20
March	52 7/8	52	52.19	1.14400	1.13616	.88481	18.06
April	52 3/16	52	52.07	1.14126	1.13697	.88269	18.11
May	52	51 1/8	51.66	1.13304	1.13396	.87633	18.24
June	51 5/8	51	51.33	1.12482	1.12532	.86997	18.37
Average	*a* 52 7/8	*a* 51	51.937	1.13852	1.13508	.88057	18.15
July	52 1/4	50 7/8	51.355	1.12619	1.12454	.87103	18.35
August	51 7/8	51 1/4	51.559	1.12893	1.12543	.87315	18.31
September	51 13/16	51 5/8	51.706	1.13441	1.12833	.87739	18.22
October	52 1/8	51 7/8	51.895	1.13715	1.13199	.87951	18.17
November	52	51 7/8	51.487	1.12893	1.13396	.87315	18.31
December	52	51 7/8	51.889	1.13715	1.13282	.87951	18.17
1882.							
January	52 1/8	51 7/8	51.980	1.13989	1.14121	.88163	18.13
February	52 1/8	52	52.028	1.13989	1.14937	.88163	18.13
March	52 1/16	51 13/16	51.963	1.13852	1.14700	.88057	18.15
April	52 1/4	52 1/16	52.122	1.14126	1.15081	.88269	18.11
May	52 3/8	52 1/8	52.223	1.14263	1.15386	.88375	18.09
June	52 3/8	51 3/4	52.016	1.13979	1.13879	.88163	18.13
Average	*a* 52 3/8	*a* 50 7/8	51.812	1.13623	1.13817	.87880	18.19

a Denotes highest and lowest for each year.

HIGHEST, LOWEST, AND AVERAGE PRICE OF SILVER BULLION, AND VALUE OF AN OUNCE FINE, ETC.—Continued.

Fiscal year.	Highest.	Lowest.	Average London price per ounce standard, 0.925.	Equivalent value of ounce fine with exchange at par, $4.8665.	Equivalent value of ounce fine based on average price of exchange.	Bullion value of a United States silver dollar at average price of silver, exchange at par.	Commercial ratio of silver to gold.
1882.	*Pence.*	*Pence.*	*Pence.*				
July	52	51⅝	51.8177	$1.13578	$1.14079	$0.87845	18.20
August	52 1/16	51⅞	51.974	1.13989	1.14659	.88163	18.13
September	52 1/16	51¾	51.913	1.13715	1.14291	.87951	18.17
October	51 15/16	51½	51.75	1.13441	1.13350	.87739	18.22
November	51¾	51	51.39	1.12619	1.12258	.87103	18.35
December	51	50	50.48	1.10701	1.10306	.85620	18.67
1883.							
January	50⅞	50⅛	50.264	1.10153	1.10058	.85196	18.76
February	51	50⅜	50.6025	1.10813	1.10912	.85706	18.65
March	51 3/16	50¼	51.022	1.11797	1.11302	.86447	18.49
April	50⅞	50⅜	50.572	1.10811	1.10704	.85705	18.65
May	50 9/16	50 1/16	50.206	1.10140	1.10198	.85186	18.76
June	50 9/16	50 1/16	50.187	1.10160	1.10835	.85201	18.76
Average	*a* 52 1/16	*a* 50	51.023	1.11826	1.11912	.86490	18.48
July	50½	50 5/16	50.375	1.10510	1.10862	.85472	18.75
August	50 9/16	50¼	50.524	1.10754	1.10831	.85661	18.66
September	50 15/16	50⅜	50.731	1.11205	1.11047	.86010	18.58
October	51	50⅞	50.914	1.11649	1.11305	.86353	18.64
November	50 15/16	50½	50.702	1.11172	1.10887	.85954	18.59
December	51	50 9/16	50.843	1.11440	1.11117	.85191	18.54
1884.							
January	51	50¾	50.865	1.11501	1.11667	.86239	18.53
February	51⅜	51	51.135	1.12093	1.12832	.86696	18.44
March	51⅛	50 1/16	50.937	1.11659	1.12513	.86361	13.51
April	51	50½	50.757	1.11265	1.12118	.86056	18.57
May	50 15/16	50¾	50.839	1.11459	1.11856	.86206	18.54
June	50 15/16	50⅝	50.800	1.11359	1.11318	.86129	18.56
Average	*a* 51⅜	*a* 50 5/16	50.791	1.11339	1.11529	.86115	18.56
July	50⅞	50 1/16	50.788	1.11333	1.10991	.86109	18.56
August	50⅞	50⅝	50.779	1.11313	1.10953	.86093	18.57
September	50 13/16	50⅝	50.738	1.11224	1.10956	.86024	18.58
October	50⅞	50 7/16	50.724	1.11193	1.10744	.86000	18.59
November	50 7/16	49 1/16	50.007	1.09623	1.09241	.84994	18.86
December	49⅝	49¼	49.641	1.08818	1.08590	.84163	18.99
1885.							
January	50	49⅜	49.688	1.08836	1.09089	.84177	18.99
February	49½	48¾	49.125	1.07791	1.07505	.83390	19.18
March	49 3/16	49	49.094	1.07561	1.07610	.83191	19.22
April	49⅞	48⅝	49.375	1.07773	1.08299	.83334	19.18
May	50	48⅞	49.437	1.07929	1.08915	.83476	19.15
June	49¼	49	49.125	1.07751	1.07818	.83338	19.18
Average	*a* 50⅞	*a* 48¾	49.843	1.09262	1.09226	.84507	18.92

a Denotes highest and lowest for each year.

HIGHEST, LOWEST, AND AVERAGE PRICE OF SILVER BULLION, AND VALUE OF AN OUNCE FINE, ETC.—Continued.

Fiscal year.	Highest.	Lowest.	Average London price per ounce standard, 0.925.	Equivalent value of ounce fine with exchange at par, $4.8665.	Equivalent value of ounce fine based on average price of exchange.	Bullion value of a United States silver dollar at average price of silver, exchange at par.	Commercial ratio of silver to gold.
1885.	*Pence.*	*Pence.*	*Pence.*				
July	49 3/16	49 1/8	49.156	$1.07839	$1.07768	$0.83406	19.17
August	49 3/16	48 7/16	48.812	1.07045	1.07075	.82792	19.31
September	48 3/8	47 1/2	47.812	1.04395	1.04166	.80534	19.80
October	47 9/16	47 1/2	47.406	1.03967	1.03887	.80411	19.88
November	47 1/2	47 5/16	47.406	1.03950	1.03587	.80398	19.88
December	47 1/2	46 7/8	47.187	1.03303	1.03338	.79819	20.01
1886.							
January	47	46 7/16	46.733	1.02444	1.02951	.79234	20.17
February	46 7/8	46 1/2	46.685	1.02339	1.02852	.79152	20.19
March	46 7/8	46 11/16	46.766	1.02517	1.02999	.79290	20.16
April	46 11/16	46	46.386	1.01683	1.02032	.78645	20.33
May	46	44 3/8	45.425	.99577	1.00046	.77016	20.76
June	45 1/8	44 1/16	44.835	.98283	.98768	.76015	21.03
Average	*a* 49 3/16	*a* 44 1/16	47.038	1.03112	1.03295	.79750	20.04
July	44 5/8	42	43.873	.96175	.96395	.74385	21.49
August	42 5/8	42	42.310	.92748	.92333	.71734	22.28
September	44 5/8	42 5/8	43.841	.96105	.95691	.74331	21.50
October	45 7/8	44 1/8	45.089	.98840	.98333	.76446	20.91
November	47	45 7/8	46.486	1.01903	1.01424	.78815	20.28
December	46 3/8	45 1/4	46.068	1.00986	1.00384	.78106	20.56
1887.							
January	47 1/8	46 1/2	46.833	1.02663	1.02560	.79403	20.13
February	47	46 5/16	46.660	1.02284	1.02669	.79110	20.21
March	46 7/16	44 5/16	45.440	.99610	.99706	.77042	20.75
April	44 5/8	43 1/2	43.964	.96374	.96490	.74539	21.44
May	43 3/4	43 7/16	43.580	.95532	.95658	.73887	21.63
June	44 1/4	43 3/4	43.968	.96383	.96130	.74546	21.44
Average	*a* 47 1/8	*a* 42	44.843	.98301	.98148	.76029	21.02
July	44 7/16	43 5/8	44.148	.96777	.96335	.74850	21.36
August	45 7/16	44 1/4	44.570	.97702	.97154	.75566	21.15
September	45	44 7/16	44.642	.97860	.97287	.75688	21.12
October	44 1/4	43 13/16	44.159	.96802	.96442	.74870	21.35
November	44	43 1/16	43.840	.96102	.95788	.74328	21.51
December	45 1/8	43 13/16	44.368	.97260	.96972	.75224	21.25
1888.							
January	44 9/16	44 3/16	44.380	.97286	.97219	.75244	21.24
February	44 7/16	43 13/16	44.033	.96525	.96421	.74656	21.41
March	43 3/4	43	43.293	.94903	.95083	.73401	21.78
April	42 7/8	42 1/2	42.669	.93535	.93709	.72343	22.10
May	42 5/8	41 5/8	42.048	.92174	.92577	.71249	22.42
June	42 1/2	42	42.092	.92271	.92683	.71365	22.43
Average	*a* 45 3/16	*a* 41 5/8	43.675	.95741	.95617	.74008	21.59

a Denotes highest and lowest for each year.

HIGHEST, LOWEST, AND AVERAGE PRICE OF SILVER BULLION, AND VALUE OF AN OUNCE FINE, ETC.—Continued.

Fiscal year.	Highest.	Lowest.	Average London price per ounce standard, 0.925.	Equivalent value of ounce fine with exchange at par, $4.8665.	Equivalent value of ounce fine based on average price of exchange.	Bullion value of a United States silver dollar at average price of silver, exchange at par.	Commercial ratio of silver to gold.
1888.	*Pence.*	*Pence.*	*Pence.*				
July	42 5/16	42	42.111	$0.92312	$0.92634	$0.71418	22.39
August	42 1/8	41 15/16	42.007	.92085	.92251	.71221	22.44
September	44 1/4	42 1/16	43.160	.94612	.94971	.73176	21.84
October	43 3/8	42 7/8	43.097	.94474	.94697	.73069	21.88
November	43 1/8	42 7/8	43.029	.94325	.94595	.73163	21.85
December	42 7/8	42 5/16	42.516	.93200	.93581	.72084	22.18
1889.							
January	42 11/16	42 3/8	42.544	.93261	.93616	.72131	22.16
February	42 3/4	42 1/4	42.594	.93371	.93752	.72216	22.13
March	42 5/8	42 1/4	42.521	.93211	.93652	.72092	22.17
April	42 5/16	42 1/8	42.185	.92474	.92918	.71522	22.35
May	42 1/4	41 15/16	42.162	.92424	.92893	.71484	22.36
June	42 5/16	42	42.034	.92143	.92547	.71266	22.43
Average	*a* 44 1/4	*a* 41 15/16	42.499	.93163	.93510	.72055	22.18
July	42 5/16	42	42.159	.92417	.92638	.71462	22.36
August	42 9/16	42 1/4	42.349	.92834	.92959	.71801	22.26
September	42 11/16	42 3/8	42.522	.93213	.93477	.72944	22.17
October	43 1/2	42 3/8	42.944	.94382	.94036	.72998	21.90
November	44 3/8	43 1/8	43.923	.96284	.95959	.74469	21.46
December	44 3/8	43 3/4	43.967	.96381	.95894	.74544	21.44
1890.							
January	44 7/8	44 1/8	44.502	.97554	.97447	.75451	21.19
February	44 5/8	43 5/8	44.042	.96545	.96563	.74671	21.41
March	44 3/8	43 3/4	43.908	.96251	.96024	.74444	21.47
April	48	43 7/8	45.451	.96634	.99751	.74699	21.39
May	47 1/2	46	46.971	1.02966	1.02820	.79637	20.07
June	49	46 3/4	47.727	1.04623	1.04778	.80919	19.75
Average	*a* 49	*a* 42	44.196	.96883	.96839	.74932	21.33
July	50 1/2	47 9/16	49.201	1.07854	1.08367	.83418	19.16
August	54 1/2	50 3/4	52.707	1.15540	1.15643	.89363	17.89
September	54 5/8	50	53.123	1.16452	1.15946	.90068	17.74
October	51 1/2	48 1/8	49.708	1.08966	1.08821	.84278	18.97
November	49 1/2	45	47.305	1.03698	1.03404	.80183	19.93
December	49 1/2	47 1/4	48.135	1.05518	1.04939	.81611	19.59
1891.							
January	48 3/4	46 7/8	47.9399	1.05085	1.05034	.81276	19.67
February	46 3/4	44 1/2	45.5470	.99844	1.00202	.77223	20.70
March	45 5/16	44 5/8	44.928	.98487	.98854	.76173	20.98
April	45	43 7/8	44.528	.97610	.99453	.75495	21.17
May	45 1/8	44 1/4	44.481	.97507	.97805	.75415	21.20
June	46	44 1/4	44.973	.98586	.98924	.76250	20.97
Average	*a* 54 5/8	*a* 43 7/8	47.714	1.04195	1.04780	.80588	19.83

a Denotes highest and lowest for each year.

HIGHEST, LOWEST, AND AVERAGE PRICE OF SILVER BULLION, AND VALUE OF AN OUNCE FINE, ETC.—Continued.

Fiscal year.	Highest.	Lowest.	Average London price per ounce standard, 0.925.	Equivalent value of ounce fine with exchange at par, $4.8665.	Equivalent value of ounce fine based on average price of exchange.	Bullion value of a United States silver dollar at average price of silver, exchange at par.	Commercial ratio of silver to gold.
1891.	*Pence.*	*Pence.*	*Pence.*				
July	46⅜	45⅝	46.002	$1.00841	$1.00825	$0.77994	20.49
August	46 1/16	44 1/16	45.112	.98890	.99390	.76485	20.90
September	45 5/16	44¾	45.016	.98680	.97767	.76322	20.95
October	45	44 1/16	44.555	.97669	.97046	.75540	21.16
November	44 1/16	43½	43.690	.95773	.95257	.74044	21.58
December	44¼	43½	43.775	.95959	.95517	.74195	21.54
1892.							
January	43¾	41¾	42.830	.93888	.93515	.72616	22.01
February	41 13/16	41⅛	41.460	.90885	.91106	.70293	22.74
March	41⅝	39	40.087	.87875	.89699	.67965	23.52
April	40⅛	39¼	39.703	.86583	.87229	.66966	23.87
May	40⅜	39 1/16	40.060	.87816	.88029	.67920	23.53
June	41⅛	40 1/16	40.564	.88921	.89298	.68772	23.24
Average	*a* 46⅜	*a* 39	42.737	.93648	.93723	.72430	22.07
July	40 3/16	39 1/16	39.632	.86877	.87181	.67193	23.79
August	39 1/16	37⅞	38.295	.83947	.84203	.65136	24.62
September	38 5/16	38⅛	38.158	.83646	.83801	.64694	24.71
October	39⅝	38⅛	38.937	.85354	.85287	.66013	24.21
November	39¼	38¾	38.971	.85428	.85512	.66073	24.19
December	39⅜	37 15/16	38.346	.84058	.84274	.65013	24.59
1893.							
January	38 9/16	38⅛	38.331	.84026	.84217	.64988	24.60
February	38½	38¼	38.356	.84080	.84316	.65030	24.46
March	38⅜	37 9/16	38.108	.83537	.83255	.64610	24.74
April	38 5/16	37⅞	38.028	.83361	.83610	.64495	24.79
May	38 9/16	37⅝	38.069	.83451	.83856	.64544	24.77
June	38¾	30½	37.279	.81719	.81654	.63204	25.29
Average	*a* 40 3/16	*a* 30½	38.375	.84123	.84263	.65063	24.57
July	34½	32⅛	33.060	.72471	.71981	.56052	28.52
August	34⅞	32⅝	33.944	.74409	.74337	.57550	27.78
September	34⅛	33⅞	34.120	.74799	.74709	.57854	27.63
October	34⅛	31½	33.608	.73672	.73339	.56723	28.05
November	32⅜	31½	32.240	.70673	.70390	.54444	29.25
December	32 5/16	31½	32.015	.70180	.70177	.54275	29.45
1894.							
January	31½	30½	33.338	.68743	.68694	.53130	30.07
February	30¾	27½	29.169	.63941	.64052	.49540	32.32
March	28	27	27.286	.59814	.60037	.46434	34.56
April	29⅜	28⅛	28.802	.63138	.63382	.49022	32.74
May	29½	28 1/16	28.704	.62921	.63180	.48865	32.85
June	28 15/16	28 5/16	28.685	.62879	.63129	.48826	32.87
Average	*a* 34⅞	*a* 27	31.247	.68136	.68117	.52726	30.50

a Denotes highest and lowest for each year.

HIGHEST, LOWEST, AND AVERAGE PRICE OF SILVER BULLION, AND VALUE OF AN OUNCE FINE, ETC.—Continued.

Fiscal year.	Highest.	Lowest.	Average London price per ounce standard, 0.925.	Equivalent value of ounce fine with exchange at par, $4.8665.	Equivalent value of ounce fine based on average price of exchange.	Bullion value of a United States silver dollar at average price of silver, exchange at par.	Commercial ratio of silver to gold.
1894.	*Pence.*	*Pence.*	*Pence.*				
July	28 15/16	28 7/16	28.673	$0.62854	$0.63041	$0.48613	32.79
August	30 1/2	28 11/16	29.377	.64398	.64474	.49807	32.06
September	30 1/4	29 3/16	29.588	.64861	.64802	.50165	31.89
October	29 9/16	28 13/16	29.150	.63900	.64005	.49422	32.29
November	29 5/16	28 3/8	28.977	.63520	.63628	.49128	32.48
December	28 1/2	27 3/16	27.747	.60825	.61063	.47044	33.85
1895.							
January	27 7/16	27 3/16	27.331	.59914	.60190	.46339	34.34
February	27 11/16	27 5/16	27.440	.60152	.60444	.46523	34.19
March	29 1/4	27 5/8	28.337	.62119	.62447	.48045	33.10
April	30 7/8	29 7/8	30.415	.66674	.67059	.51568	30.82
May	30 7/8	30 3/16	30.625	.67133	.67289	.51923	30.72
June	30 1/16	30 3/16	30.460	.66771	.67139	.51643	30.78
Average	*a* 30 1/16	*a* 27 3/8	29.010	.63593	.63798	.49183	32.40
July	30 5/8	30 3/16	30.439	.66727	.67187	.51484	30.97
August	30 1/2	30 1/4	30.393	.66625	.67122	.51261	30.87
September	30 9/16	30 7/16	30.489	.66836	.67234	.51694	30.92
October	31 1/8	30 5/8	30.928	.67798	.68010	.52437	30.49
November	31	30 5/8	30.789	.67493	.68592	.52201	30.62
December	30 11/16	30	30.395	.66631	.66963	.51534	31.02
1896.							
January	30 7/8	30 1/2	30.649	.67186	.67518	.51966	30.76
February	31 9/16	30 3/4	30.992	.67939	.68104	.52546	30.41
March	31 7/16	31 1/8	31.372	.68772	.68988	.53190	30.05
April	31 5/16	30 13/16	31.060	.68087	.68401	.52661	30.36
May	31 1/4	30 11/16	31.078	.68126	.68851	.52691	30.34
June	31 9/16	31 3/16	31.403	.68840	.69091	.53243	30.02
Average	*a* 31 7/16	*a* 30	30.832	.67588	.68005	.52242	30.58

a Denotes highest and lowest for each year.

XLIII.—Changes in the Values of Foreign Coins, 1880–1896.

Country.	Monetary unit.	VALUE JANUARY 1—					
		1880.	1881.	1882.	1883.	1884.	1885.
Austria-Hungary	Silver florin	$0.41,3	$0.40,7	$0.40,6	$0.40,1	$0.39,8	$0.39,3
Bolivia	Silver boliviano	.83,6	.82,3	.82,3	.81,2	.80,6	.79,5
Central American States.	Silver peso	.83,6	.....	.....	.....	.....	.....
China	Silver tael, Shanghai	.....	.....	.....	.....	.....	.....
Do	Silver tael, Haikwan	.....	.....	.....	.....	.....	.....
Colombia	Silver peso	.83,6	.82,3	.82,3	.81,2	.80,6	.79,5
Cuba	Gold peso	.....	.93,2	.93,2	.93,2	.93,2	.93,2
Ecuador	Silver peso *a*	.83,6	.82,3	.82,3	.81,2	.80,6	.79,5
India	Silver rupee	.39,7	.39,0	.39,0	.38,6	.38,3	.37,8
Japan	Silver yen	.....	.88,8	.88,7	.87,6	.86,9	.85,8
Mexico	Silver dollar	.90,9	.89,4	.89,4	.88,2	.87,5	.86,4
Peru	Silver sol	.83,6	.82,3	.82,3	.81,2	.80,6	.79,5
Russia	Silver ruble	.66,9	.65,8	.65,8	.65,0	.64,5	.63,6
Tripoli	Silver mahbub	.74,8	.74,3	.74,3	.73,3	.72,7	.71,7
Venezuela	Gold bolivar	.....	.19,3	.19,3	.19,3	.19,3	.19,3

Country.	Monetary unit.	VALUE JANUARY 1—				VALUE 1890.	
		1886.	1887.	1888.	1889.	Jan. 1.	Oct. 1.
Austria-Hungary	Silver florin	$0.37,1	$0.35,9	$0.34,5	$0.33,6	$0.34,5	$0.42,0
Bolivia	Silver boliviano	.75,1	.72,7	.69,9	.68,0	.69,8	.85,0
Central American States.	Silver peso	.....	.....	.69,9	.68,0	.69,8	.85,0
China	Silver tael, Shanghai	.....	.....	1.03,3	1.00,5	1.03,1	1.25,6
Do	Silver tael, Haikwan	.....	.....	1.15,1	.....	1.14,8	1.40,0
Colombia	Silver peso	.75,1	.72,7	.69,9	.68,0	.69,9	.85,0
Cuba	Gold peso	.93,2	.93,2	.92,6	.92,6	.92,6	.92,6
Ecuador	Silver peso *a*	.75,1	.72,7	.69,9	.68,0	.69.8	.85,0
India	Silver rupee	.35,7	.34,6	.33,2	.32,3	.33,2	.40,4
Japan	Silver yen	.81,0	.78,4	.75,3	.73,4	.75,2	.91,7
Mexico	Silver dollar	.81,6	.79,0	.75,9	.73,9	.75,8	.92,3
Peru	Silver sol	.75,1	.72,7	.69,9	.68,0	.69,8	.85,0
Russia	Silver ruble	.60,1	.58,2	.55,9	.54,4	.55,8	.68,0
Tripoli	Silver mahbub	.67,7	.65,6	.63,0	.61,4	.62,9	.76,7
Venezuela	Gold bolivar	.19,3	.19,3	*b*.14,0	*b*.15,6	*b*.14,0	*b*.17,0

a Since 1887 called "sucre." *b* Value of the silver bolivar.

CHANGES IN THE VALUES OF FOREIGN COINS, 1880–1896—Continued.

Country.	Monetary unit.	VALUE 1891.				VALUE 1892.	
		Jan. 1.	Apr. 1.	July 1.	Oct. 1.	Jan. 1.	Apr. 1.
Austria-Hungary..	Silver florin	$0.38,1	$0.36,3	$0.36,3	$0.35,7	$0.34,1	$0.32,8
Bolivia	Silver boliviano	.77,1	.73,5	.73,6	.72,3	.69,1	.66,5
Central American States.	Silver peso	.77,1	.73,5	.73,6	.72,3	.69,1	.66,5
China.....	Silver tael, Shanghai ..	1.13,9	1.08,5	1.08,7	1.06,8	1.02,1	.98,2
Do.....	Silver tael, Haikwan ..	1.27,0	1.20,9	1.21,0	1.18,9	1.13,7	1.09,3
Colombia	Silver peso	.77,1	.73,5	.73,6	.72,3	.69,1	.66,5
Cuba.....	Gold peso	.92,6	.92,6	.92,6	.92,6	.92,6	.92,6
Ecuador	Silver peso *a*	.77,1	.73,5	.73,3	.72,3	.69,1	.66,5
India	Silver rupee.....	.36,6	.34,9	.35,0	.34,3	.32,8	.31,6
Japan.....	Silver yen.....	.83,1	.79,2	.79,3	.77,9	.74,5	.71,6
Mexico	Silver dollar	.83,7	.80,0	.80,0	.78,5	.75,0	.72,2
Peru.....	Silver sol	.77,1	.73,5	.73,6	.72,3	.69,1	.66,5
Russia.....	Silver ruble	.61,7	.58,8	.58,8	.57,8	.55,3	.53,1
Tripoli.....	Silver mahbub	.69,5	.66,3	.66,4	.65,2	.62,3	.60,0
Venezuela	Gold bolivar	*b*.15,4	*b*.14,7	*b*.14,7	*b*.14,5	*b*.13,8	*b*.13,3

Country.	Monetary unit.	VALUE 1892.		VALUE 1893.			
		July 1.	Oct. 1.	Jan. 1.	Apr. 1.	July 1.	Oct. 1.
Austria-Hungary..	Silver florin	$0.32,0	*c*$0.20,3	*c*$0.20,3	*c*$0.20,3	*c*$0.20,3	*c*$0.20,3
Bolivia	Silver boliviano	.64,9	.61,6	.61,3	.61,0	.60,4	.53,1
Central American States.	Silver peso.....	.64,9	.61,6	.61,3	.61,0	.60,4	.53,1
China.....	Silver tael, Shanghai ..	.95,8	.91,0	.90,6	.90,1	.89,2	.78,4
Do.....	Silver tael, Haikwan ..	1.06,7	1.01,3	1.01,0	1.00,4	.99,4	.87,4
Colombia	Silver peso	.64,9	.61,6	.61,3	.61,0	.60,4	.53,1
Cuba	Gold peso	.92,6	.92,6	.92,6	.92,6	.92,6	.92,6
Ecuador.....	Silver peso *a*	.64,9	.61,6	.61,3	.61,0	.60,4	.53,1
India	Silver rupee.....	.30,8	.29,3	.29,2	.29,0	.28,7	.25,2
Japan.....	Silver yen.....	.69,9	.66,4	.66,1	.65,8	.65,1	.57,3
Mexico	Silver dollar.....	.70,4	.66,9	.66,6	.66,2	.65,6	.57,7
Peru.....	Silver sol.....	.64,9	.61,6	.61,3	.61,0	.60,4	.53,1
Russia.....	Silver ruble	.51,9	.49,2	.49,1	.48,8	.48,3	.42,5
Tripoli	Silver mahbub	.58,5	.55,5	.55,3	.55,0	.54,5	.47,9
Venezuela	Gold bolivar	*b*.13,0	*b*.12,3	.19,3	.19,3	.19,3	.19,3

a Since 1887 called "sucre." *b* Value of the silver bolivar. *c* Value of the gold crown.

CHANGES IN THE VALUES OF FOREIGN COINS, 1880–1896—Continued.

Country.	Monetary unit.	VALUE 1894.			
		Jan. 1.	Apr. 1.	July 1.	Oct. 1.
Bolivia	Silver boliviano	$0.51,6	$0.46,5	$0.45,7	$0.46,4
Central American States	Silver peso	.51,6	.46,5	.45,7	.46,4
China	Silver tael, Shanghai	.76,2	.68,6	.67,6	.68,5
Do	Silver tael, Haikwan	.84,9	.76,5	.75,3	.76,3
Do	Silver tael, Tientsin				.72,7
Do	Silver tael, Chefoo				.71,7
Colombia	Silver peso	.51,6	.46,5	.45,7	.46,4
Ecuador	Silver peso *a*	.51,6	.46,5	.45,7	.46,4
India	Silver rupee	.24,5	.22,1	.21,7	.22,0
Japan	Silver yen	.55,6	.50,1	.49,3	.50,0
Mexico	Silver dollar	.56,0	.50,5	.49,7	.50,4
Peru	Silver sol	.51,6	.46,5	.45,7	.46,4
Russia	Silver ruble	.41,3	.37,2	.36,6	.37,1
Tripoli	Silver mahbub	.46,5	.41,9	.41,3	.41,8

Country.	Monetary unit.	VALUE 1895.			
		Jan. 1.	Apr. 1.	July 1.	Oct. 1.
Bolivia	Silver boliviano	$0.45,5	$0.44,1	$0.48,6	$0.48,6
Central American States	Silver peso	.45,5	.44.1	.48,6	.48,6
China	Silver tael, Shanghai	.67.3	.65,2	.71,8	.71,8
Do	Silver tael, Haikwan	.74,9	.72,6	.80,0	.80,0
Do	Silver tael, Tientsin	.71,4	.69,2	.76,1	.76,2
Do	Silver tael, Chefoo	.70,4	.68,3	.75,1	.75,2
Colombia	Silver peso	.45,5	.44,1	.48,6	.48,6
Ecuador	Silver peso *a*	.45,5	.44,1	.48,6	.48,6
India	Silver rupee	.21,6	.21,0	.23,1	.23,1
Japan	Silver yen	.49,1	.47,6	.52,4	.52,4
Mexico	Silver dollar	.49,5	.47,9	.52,8	.52,8
Persia	Silver kran		.08,1	.08,9	.09,0
Peru	Silver sol	.45,5	.44,1	.48,6	.48,6
Russia	Silver ruble	.36,4	.35,3	.38,9	.38,9
Tripoli	Silver mahbub	.41,1	.39,8	.43,8	.43,8

a Since 1887 called "sucre."

CHANGES IN THE VALUES OF FOREIGN COINS, 1880–1896—Continued.

Country.	Monetary unit.	VALUE 1896.			
		Jan. 1.	Apr. 1.	July 1.	Oct. 1.
Bolivia	Silver boliviano	$0.49,1	$0.49,3	$0.49,7	$0.49,0
Central American States	Silver peso	.49,1	.49,3	.49,7	.49,0
Chile	Gold and silver peso	.91,2	.91,2	.....	.....
Do	Gold peso	.....	.....	.36,5	.36,5
China	Silver tael, Amoy	.....	.....	.80,5	.79,3
Do	Silver tael, Canton	.....	.....	.80,2	.79,0
Do	Silver tael, Chefoo	.75,9	.76,3	.76,9	.75,8
Do	Silver tael, Chin Kiang	.....	.....	.78,6	.77,4
Do	Silver tael, Haikwan	.80,8	.81,2	.81,9	.80,6
Do	Silver tael, Haukow	.....	.....	.75,3	.74,2
Do	Silver tael, Hongkong	(a)	(a)	(a)	(a)
Do	Silver tael, Fuchau	.....	.....	.74,4	.73,3
Do	Silver tael, Niuchwang	.....	.....	.75,5	.74,3
Do	Silver tael, Ningpo	.....	.....	.74,4	.76,2
Do	Silver tael, Shanghai	.72,5	.72,9	.73,5	.72,4
Do	Silver tael, Swatow	.....	.....	.74,3	.73,2
Do	Silver tael, Takau	.....	.....	.81,0	.79,8
Do	Silver tael, Tientsin	.76,9	.77,3	.78,0	.76,8
Colombia	Silver peso	.49,1	.49,3	.49,7	.49,0
Ecuador	Silver sucre	.49,1	.49,3	.49,7	.49,0
India	Silver rupee	.23,3	.23,4	.23,6	.23,3
Japan	Silver yen	.52,9	.53,2	.53,6	.52,8
Mexico	Silver dollar	.53,3	.53,6	.54,0	.53,2
Persia	Silver kran	.09,0	.09,1	.09,2	.09,0
Peru	Silver sol	.49,1	.49,3	.49,7	.49,0
Russia	Silver ruble	.39,3	.39,5	.39,8	.39,2
Tripoli	Silver mahbub	.44,3	.44,5	.44,9	.44,2

a The "British dollar" has the same legal value as the Mexican dollar in Hongkong, the Straits Settlement, and Labuan.

XLIV.—GOLD AND SILVER BARS FURNISHED FOR USE IN MANUFACTURES AND THE ARTS, AND CLASSIFICATION OF THE MATERIAL USED, DURING THE CALENDAR YEARS 1880–1895.

GOLD.

Calendar year.	United States coin.	New material.	Old material.	Foreign bullion and coin.	Total.
1880	$3,300,000	$6,000,000	$395,000	$1,267,600	$10,962,600
1881	2,700,000	7,000,000	522,900	1,547,800	11,770,700
1882	2,500,000	7,000,000	696,500	671,500	10,868,000
1883	4,875,000	7,840,000	1,549,300	194,500	14,458,800
1884	5,000,000	6,000,000	3,114,500	385,500	14,500,000
1885	3,500,000	6,736,927	1,408,902	178,913	11,824,742
1886	3,500,000	7,003,480	1,928,046	638,003	13,069,529
1887	3,500,000	9,090,342	1,835,882	384,122	14,810,346
1888	3,500,000	9,893,057	2,402,976	718,809	16,514,842
1889	3,500,000	9,686,827	3,218,971	291,258	16,697,056
1890	3,500,000	10,717,472	3,076,426	362,062	17,655,960
1891	3,500,000	10,697,679	4,860,712	628,525	19,686,916
1892	3,500,000	10,588,703	4,468,685	771,686	19,329,074
1893	1,500,000	8,354,482	2,777,165	804,254	13,435,901
1894	1,500,000	6,430,073	2,184,946	543,585	10,658,604
1895	1,500,000	8,481,789	2,976,269	471,027	13,429,085
Total	50,875,000	131,520,831	37,417,180	9,859,144	229,672,155

SILVER (COINING VALUE).

1880	$600,000	$5,000,000	$145,000	$353,000	$6,098,000
1881	200,000	5,900,000	178,000	371,000	6,649,000
1882	200,000	6,344,300	212,900	440,300	7,197,500
1883	200,000	4,623,700	561,900	155,000	5,540,600
1884	200,000	4,500,000	170,000	650,000	5,520,000
1885	200,000	4,539,875	462,186	62,708	5,264,769
1886	200,000	3,626,195	404,155	825,615	5,055,965
1887	200,000	4,102,734	480,606	654,991	5,438,331
1888	200,000	6,477,857	652,047	771,985	8,101,889
1889	200,000	7,297,933	611,015	657,997	8,766,945
1890	200,000	7,143,635	640,100	1,245,419	9,229,154
1891	200,000	7,289,073	858,126	1,256,101	9,603,300
1892	200,000	7,204,210	647,377	1,249,801	9,301,388
1893	100,000	6,570,737	1,222,836	1,740,704	9,634,277
894	100,000	8,579,472	1,221,177	982,399	10,883,048
895	100,000	9,825,387	1,378,136	973,501	12,277,024
Total	3,300,000	99,025,108	9,845,561	12,390,521	124,561,190

XLV.—Expenditures at the Mint of the United States at Philadelphia for the Fiscal Year ended June 30, 1896.

Expenditures for supplies.	Engraver's department.	General department.		Assayer's department.	Coiner's department.	Melter and refiner's department.		Total.
		Proper.	Mechanical.			Proper.	Refinery.	
Acids				$141.62		$93.46	$5,074.82	$5,309.90
Advertisements for supplies		$1,158.20						1,158.20
Assayer's materials				67.94				67.94
Belting		4.20	$142.45	22.50				169.15
Charcoal	$5.40					499.30		504.70
Chemicals	10.82	274.06	.62	69.18	$606.80	1,043.04	143.36	2,147.88
Coal		3,794.27	5.00		110.88	1,202.34		5,112.49
Copper		63.24			886.61	3,388.75		4,338.60
Crucibles, covers, stirrers, and dippers				33.02		2,334.74	29.59	2,397.35
Dry goods	.66	386.84	12.64	2.86	837.97	144.80	52.52	1,438.29
Fire brick	8.34	90.25		21.94	51.84	103.32		275.69
Fluxes						2.50		2.50
Freight and drayage		8,057.50						8,057.50
Furnaces				36.20		194.00		230.20
Gas	309.50	1,443.00		502.20	2,447.70			4,702.40
Gloves and gauntlets		459.75		3.17	2,075.89	599.60	60.78	3,199.19
Hardware	2.08	435.46	79.79	3.20	77.29	18.20		616.02
Ice		377.30					47.76	425.06
Iron and steel	370.98	48.05	210.75	.07	46.66	20.00		696.51
Labor and repairs	5.00	99.39	56.44	109.25	39.95	4.75		314.78
Loss on sale of sweeps						623.25	73.84	697.09
Lumber	7.24	1,509.93	12.15		280.10	30.19		1,839.61
Machinery and appliances		116.28	28.55	62.50	100.71	531.76	21.00	860.80
Metal work and castings	1.30	181.03	20.33		607.72	39.38		849.76
Oils	.86	169.03	4.50		414.93	87.45		676.77
Salt				.60			288.75	289.35
Stationery, printing, and binding	.95	794.37		7.90	44.00	30.00		877.22
Sundries	101.06	3,289.08	47.56	46.22	1,064.78	7,207.27	100.81	11,856.78
Telegraphing		9.88						9.88
Telephone		120.00						120.00
Tools	6.00	62.37	154.46		23.37			246.20
Washing		211.21						211.21
Water		548.00						548.00
Wood					1,980.80			1,980.80
Zinc							1,819.56	1,819.56
Wastage					539.07	2,965.64	362.80	3,867.51
Total	830.19	23,702.69	775.24	1,130.37	12,237.07	21,163.74	8,075.59	67,914.89
Salaries	3,000.00	23,453.86		5,000.00	5,000.00	5,000.00		41,453.86
Wages of workmen	10,870.83	107,295.13	12,716.86	12,735.07	140,452.90	25,052.77	20,421.05	329,544.61
Total	14,701.02	154,451.68	13,492.10	18,865.44	157,689.97	51,216.51	28,496.64	438,913.36

Included in above payments, $28,959.22 were paid from appropriation for the coinage of silver bullion on account of wages, and $4,990.90 from appropriation for storage of silver bullion on account of wages, and $68.75 on account of incidental expenses.

EXPENDITURES AT THE MINT OF THE UNITED STATES AT SAN FRANCISCO FOR THE FISCAL YEAR ENDED JUNE 30, 1896.

Expenditures for supplies.	GENERAL DEPARTMENT.		Assayer's department.	Coiner's department.	MELTER AND REFINER'S DEPARTMENT.		Total.
	Proper.	Mechanical.			Proper.	Refinery.	
Acids	$1.20	.....	$490.93	$86.40	.....	$3,597.40	$4,175.93
Advertisements for supplies	206.26	.....	.....	.....	.....	.....	206.26
Assayer's materials	.....	.....	165.90	.....	.....	.....	165.90
Belting	.....	$142.92	.....	.....	.....	.....	142.92
Charcoal	.....	.....	.....	.....	$796.07	.....	796.07
Chemicals	256.32	.....	83.57	468.76	708.79	.....	1,517.44
Coal	215.89	5,609.72	.....	.....	.....	.....	5,825.61
Coke	.....	.....	.....	.....	787.12	.....	787.12
Copper	.....	.....	.....	.....	4,550.00	.....	4,550.00
Crucibles, covers, stirrers, and dippers	.....	.....	11.50	.....	1,171.22	.....	1,182.72
Dry goods	948.44	.....	2.51	64.80	94.38	.....	1,110.13
Fire brick	.....	38.75	.....	10.50	120.25	.....	169.50
Freight and drayage	713.59	.....	6.91	.....	165.40	.....	885.90
Gas	2,369.15	.....	.....	.....	.....	.....	2,369.15
Gloves and gauntlets	45.50	.....	28.17	1,008.50	252.00	.....	1,334.17
Hardware	51.25	.....	.....	.....	.....	.....	51.25
Ice	232.00	.....	.....	.....	.....	.....	232.00
Iron and steel	.....	56.24	10.70	29.98	106.15	.....	203.07
Labor and repairs	409.67	706.28	28.55	393.35	677.58	.....	2,215.43
Lead	84.66	21.56	.....	.....	233.98	.....	340.20
Lumber	.....	113.98	7.09	173.75	115.88	.....	410.70
Machinery and appliances	.....	1,135.66	.....	14.50	75.97	.....	1,226.13
Metal work and castings	.....	28.41	.....	106.04	264.43	.....	398.88
Oils	.....	327.30	.....	46.33	31.32	.....	404.95
Salt	.....	.....	1.25	.....	184.02	.....	185.27
Sewing	761.27	.....	.....	.....	999.75	.....	1,761.02
Stationery, printing, and binding	258.15	.....	.....	13.50	.....	.....	271.65
Sundries	1,069.25	134.24	.90	373.80	267.20	.....	1,845.39
Telephone	168.30	.....	.....	.....	.....	.....	168.30
Tools	.....	106.86	.....	69.20	19.00	.....	195.06
Washing	746.60	.....	.....	.....	.....	.....	746.60
Water	297.50	55.65	.....	.....	.....	.....	353.15
Wood	123.60	960.95	.....	917.70	139.05	5.15	2,146.45
Total	8,958.60	9,438.52	837.98	3,777.11	11,759.56	3,602.55	38,374.32
Salaries	24,499.91	.....	6,600.00	5,000.00	5,000.00	.....	41,099.91
Wages of workmen	44,446.75	15,761.00	17,609.00	78,344.25	28,350.75	20,124.25	204,636.00
Total	77,905.26	25,199.52	25,046.98	87,121.36	45,110.31	23,726.80	284,110.23

EXPENDITURES AT THE MINT OF THE UNITED STATES AT NEW ORLEANS, LA., FOR THE FISCAL YEAR ENDED JUNE 30, 1896.

Expenditures for supplies.	GENERAL DEPARTMENT.		Assayer's department.	Coiner's department.	MELTER AND REFINER'S DEPARTMENT.		Total.
	Proper.	Mechanical.			Proper.	Refinery.	
Acids	.....	.....	$41.50	$39.83	$21.83	$243.30	$346.46
Advertisements for supplies	$157.50	.....	.....	.....	.....	.....	157.50
Assayer's materials	.....	.....	169.98	.....	.....	.....	169.98
Belting	.....	$101.01	.....	16.46	.....	.....	117.47
Charcoal	.....	.....	.....	.....	180.94	.....	180.94
Chemicals	.....	3.50	4.50	258.03	.....	.....	266.03
Coal	.....	1,978.50	.....	.....	.....	.....	1,978.50
Coke	.....	.....	.....	.....	571.03	.....	571.03
Copper	.....	70.41	.....	.....	2,265.00	.....	2,335.41
Dry goods	73.09	.....	.....	264.03	52.45	.....	389.57
Electric light	22.54	.....	.....	.....	.....	.....	22.54
Electric power	.....	308.85	.....	.....	.....	.....	308.85
Fire brick	.....	18.80	.....	50.60	29.83	.....	99.23
Freight and drayage	21.93	.....	2.50	17.07	9.32	.....	50.82
Gas	212.96	.....	673.19	.....	.....	.....	886.15
Gloves and gauntlets	.....	.....	.....	224.00	.....	.....	224.00
Hardware	107.02	.....	.....	5.62	13.17	.....	125.81
Ice	91.00	.....	.....	89.40	103.70	.....	284.10
Iron and steel	.....	17.86	.....	.....	.....	.....	17.86
Labor and repairs	68.25	.....	.....	194.85	35.00	.....	298.10
Loss on sale of sweeps	.....	.....	.....	106.58	784.90	.....	891.48
Lumber	300.87	.....	.....	.....	.....	.....	300.87
Machinery and appliances	.....	99.92	.....	31.41	.....	.....	131.33
Metal work and castings	.....	30.12	.....	250.38	321.16	.....	601.66
Oils	.....	108.45	.....	40.75	90.54	.....	239.74
Salt	.....	.....	.....	.....	2.70	.....	2.70
Sewing	150.00	.....	.....	38.80	53.75	.....	242.55
Stationery, printing, and binding	37.52	.....	.....	.....	.....	.....	37.52
Sundries	936.42	.....	20.20	435.10	115.50	.....	1,507.22
Telegraphing	10.58	.....	.....	.....	.....	.....	10.58
Telephone	106.00	.....	.....	.....	.....	.....	106.00
Washing	105.00	.....	.....	152.35	.....	.....	257.35
Wood	.....	.....	.....	1,541.85	.....	.....	1,541.85
Zinc	.....	.....	.....	.....	18.00	.....	18.00
Ensign	15.00	.....	.....	.....	.....	.....	15.00
Wastage of operative officers	.....	.....	.....	298.51	622.79	.....	921.30
Total	2,415.68	2,737.42	911.87	4,055.62	5,291.61	243.30	15,655.50
Salaries	16,674.07	.....	5,952.16	4,212.11	4,400.00	.....	31,238.34
Wages of workmen	26,230.58	.....	2,078.50	28,606.07	10,861.75	.....	67,776.90
Total	45,320.33	2,737.42	8,942.53	36,873.80	20,553.36	243.30	114,670.74

EXPENDITURES AT THE MINT OF THE UNITED STATES AT CARSON, NEV., FOR THE FISCAL YEAR ENDED JUNE 30, 1896.

Expenditures for supplies.	General department proper.	Assayer's department.	MELTER AND REFINER'S DEPARTMENT.		Total.
			Proper.	Refinery.	
Acids	.....	$97.18	.....	.....	$97.18
Advertisements for supplies	$60.77	.....	.....	.....	60.77
Assayer's balances	.....	11.70	.....	.....	11.70
Assayer's materials	.....	63.99	.....	.....	63.99
Charcoal	1,294.00	.....	.....	.....	1,294.00
Chemicals	17.36	43.25	.....	.....	60.61
Coal	72.75	.....	.....	.....	72.75
Coke	105.00	.....	.....	.....	105.00
Crucibles, covers, stirrers, and dippers	223.82	.....	.....	.....	223.82
Dry goods	9.75	.....	.....	.....	9.75
Electric light	175.00	.....	.....	.....	175.00
Freight and drayage	250.10	.....	.....	.....	250.10
Gas	332.30	.....	.....	.....	332.30
Gloves and gauntlets	54.50	.....	.....	.....	54.50
Hardware	61.11	.....	.....	.....	61.11
Ice	56.40	.....	.....	.....	56.40
Labor and repairs	81.50	30.50	.....	.....	112.00
Loss on shipments to San Francisco Mint	69.39	.....	.....	.....	69.39
Lumber	32.11	.....	.....	.....	32.11
Oils	20.30	.....	.....	.....	20.30
Sewing	22.95	.....	.....	.....	22.95
Stationery, printing, and binding	36.86	.....	.....	.....	36.86
Sundries	85.15	7.20	.....	.....	92.35
Washing	70.00	.....	.....	.....	70.00
Water	600.00	.....	.....	.....	600.00
Lead	.....	10.00	.....	.....	10.00
Soapstone	.....	40.50	.....	.....	40.50
Charges deducted on shipments	.....	.....	.....	$638.09	638.09
Investigation of embezzlement of gold bullion	1,631.99	.....	.....	.....	1,631.99
Total	5,363.11	304.32	.....	638.09	6,305.52
Salaries	8,468.08	4,000.00	$2,635.96	.....	15,104.04
Wages of workmen	12,160.50	1,419.75	.....	380.50	13,960.75
Total	25,991.69	5,724.07	2,635.96	1,018.59	35,370.3

EXPENDITURES AT THE ASSAY OFFICE OF THE UNITED STATES AT NEW YORK FOR THE FISCAL YEAR ENDED JUNE 30, 1896.

Expenditures for supplies.	General department proper.	Assayer's department.	MELTER AND REFINER'S DEPARTMENT.		Total.
			Proper.	Refinery.	
Acids		$205.46		$12,698.97	$12,904.43
Advertisements for supplies	$99.00				99.00
Assayer's balances		15.00			15.00
Assayer's materials		756.35			756.35
Charcoal				743.00	743.00
Coal				1,667.15	1,667.15
Copper				6,150.56	6,150.56
Crucibles, covers, stirrers, and dippers				3,624.97	3,624.97
Dry goods	15.38			615.30	630.68
Electric light and supplies	649.26				649.26
Electric power		90.74			90.74
Fire brick	15.30			232.69	247.99
Fluxes				1,745.40	1,745.40
Freight and drayage	4.55				4.55
Furnaces		147.00			147.00
Gas	488.75	730.63		1,664.51	2,883.89
Gloves and gauntlets, rubber, tubing, etc				606.28	606.28
Hardware		7.45			7.45
Ice	70.16				70.16
Labor and repairs	1,708.07	273.36		1,125.82	3,107.25
Lumber				261.27	261.27
Machinery and appliances	142.90	557.50		477.88	1,178.28
Metal work and castings	105.28	4.27		1,664.88	1,774.43
Oils	10.00			149.81	159.81
Sewing	10.40			220.00	230.40
Stationery, printing, and binding	182.94				182.94
Steam, supply of	1,730.32			6,033.52	7,763.84
Sundries	125.76	42.85		102.78	271.39
Washing and cleaning	831.90	147.83			979.73
Water				300.40	300.40
Adjusting weights and repairing balances	153.00	5.00			158.00
Barrels and lard tierces				600.34	600.34
Brooms, brushes, etc	34.38			53.78	88.16
Sheet lead and leadpipe				577.88	577.88
Soaps	63.97			6.24	70.21
Carting ashes, etc				229.50	229.50
Quicksilver				80.33	80.33
Furniture and repairs	65.75	47.35			113.10
Total	6,507.07	3,030.79		41,633.26	51,171.12
Salaries	22,550.00	11,200.00	$5,500.00		39,250.00
Wages of workmen	15,766.00	11,130.50		45,079.20	71,975.70
Total	44,823.07	25,361.29	5,500.00	86,712.46	162,396.82

EXPENDITURES AT THE MINT OF THE UNITED STATES AT DENVER, COLO., FOR THE FISCAL YEAR ENDED JUNE 30, 1896.

Expenditures for supplies.	GENERAL DEPARTMENT.		Assayer's department.	Melter and refiner's department proper.	Total.
	Proper.	Mechanical.			
Acids			$40.90	$90.25	$131.15
Assayer's materials			124.75		124.75
Chemicals			13.60	66.80	80.40
Coal	$43.50				43.50
Coke	114.50				114.50
Crucibles, covers, stirrers, and dippers				290.47	290.47
Dry goods				145.82	145.82
Fluxes				446.53	446.53
Freight and drayage	23.92	$8.31			32.23
Gas	51.80	2.20	319.30	410.90	784.20
Gloves and gauntlets				17.50	17.50
Ice	29.30				29.30
Labor and repairs	388.01	6.38	7.50	11.20	413.09
Metal work and castings				5.30	5.30
Oils		4.75			4.75
Salt				3.50	3.50
Sewing				35.20	35.20
Stationery, printing, and binding	44.99				44.99
Sundries	886.15		233.60	78.40	1,198.15
Telegraphing	1.44				1.44
Washing	51.72				51.72
Water	101.50				101.50
Wood	4.00				4.00
Bullion boxes	106.00				106.00
Electric light	173.72				173.72
Electric power			60.00	60.00	120.00
Advertising	40.55				40.55
Flags	12.80				12.80
Total	2,073.90	21.64	799.65	1,661.87	4,557.06
Salaries	6,200.00		3,900.00	2,250.00	12,350.00
Wages of workmen	7,324.14		7,729.18	4,946.68	20,000.00
Total	15,598.04	21.64	12,428.83	8,858.55	36,907.06

EXPENDITURES AT THE ASSAY OFFICE OF THE UNITED STATES AT HELENA, MONT., FOR THE FISCAL YEAR ENDED JUNE 30, 1896.

Expenditures for supplies.	General department proper.	Melter and refiner's department proper.	Total.
Acids	$19.67	.....	$19.67
Advertisements for supplies	4.50	.....	4.50
Assayer's balances	130.00	.....	130.00
Assayer's materials	136.81	.....	136.81
Belting	14.20	.....	14.20
Chemicals	15.45	.....	15.45
Coal	220.16	.....	220.16
Crucibles, covers, stirrers, and dippers	.....	$279.38	279.38
Dry goods	73.75	.....	73.75
Electric light	31.74	.....	31.74
Electric power	89.05	.....	89.05
Freight and drayage	36.59	.....	36.59
Furnaces	.....	47.52	47.52
Gas	269.80	603.00	872.80
Gloves and gauntlets	.....	10.00	10.00
Hardware	38.26	.....	38.26
Ice	36.00	.....	36.00
Iron and steel	14.35	.....	14.35
Labor and repairs	474.33	87.07	561.40
Machinery and appliances	227.25	520.00	747.25
Metal work and castings	140.00	125.40	265.40
Oils	12.10	9.00	21.10
Stationery, printing, and binding	21.21	.....	21.21
Sundries	190.35	.....	190.35
Telegraphing	9.98	.....	9.98
Telephone	80.00	.....	80.00
Washing	24.00	.....	24.00
Water	116.18	100.00	216.18
Wood	80.00	.....	80.00
Bullion boxes	172.00	.....	172.00
New fence	510.35	.....	510.35
Total	3,188.08	1,781.37	4,969.45
Salaries	7,250.00	.....	7,250.00
Wages of workmen	13,227.00	.....	13,227.00
Total	23,665.08	1,781.37	25,446.45

EXPENDITURES AT THE ASSAY OFFICES OF THE UNITED STATES AT BOISE, CHARLOTTE, AND ST. LOUIS FOR THE FISCAL YEAR ENDED JUNE 30, 1896.

Expenditures for supplies.	Boise.	Charlotte.	St. Louis.	Total.
Acids	$116.60	$20.39	.....	$136.99
Advertisements for supplies	4.20	.....	.....	4.20
Assayer's materials	131.99	82.16	$144.77	361.92
Charcoal	.....	26.76	.....	26.76
Chemicals	.....	4.50	.....	4.50
Coal	10.25	104.00	.....	114.25
Coke	174.37	.....	.....	174.37
Crucibles, covers, stirrers, and dippers	220.56	.....	.....	220.56
Dry goods	15.37	5.45	.....	20.82
Electric light	126.00	.....	.....	126.00
Fire brick	21.20	.....	.....	21.20
Fluxes	80.00	52.40	.....	132.40
Freight and drayage	72.85	10.82	1.00	84.67
Furnaces	27.00	.....	.....	27.00
Gas and gasoline	124.65	211.05	101.11	436.81
Gloves and gauntlets	18.00	.....	.....	18.00
Hardware	79.86	13.68	.....	93.54
Ice	45.00	25.00	.....	70.00
Labor and repairs	134.94	68.79	.....	203.73
Lumber	16.97	1.04	.....	18.01
Machinery and appliances	172.75	.....	5.60	178.35
Oils	7.10	4.20	11.20	22.50
Salt	1.00	.....	.....	1.00
Stationery, printing, and binding	50.55	22.62	.....	73.17
Sundries	89.90	84.15	14.25	188.30
Telegraphing	4.67	.....	.....	4.67
Telephone	60.00	.....	100.00	160.00
Tools	9.00	.....	.....	9.00
Washing	12.00	.....	.....	12.00
Water for ordinary use and heating purposes	178.00	62.50	.....	240.50
Wood	57.75	57.25	.....	115.00
Carpet	.....	56.56	.....	56.56
Flag	.....	6.40	.....	6.40
Sprinkling streets	45.00	.....	.....	45.00
Water for irrigating purposes	75.00	.....	.....	75.00
Total	2,182.53	919.72	377.93	3,480.18
Salaries	3,200.00	2,750.00	3,000.00	8,950.00
Wages of workmen	6,817.47	1,080.00	1,006.50	8,903.97
Total	12,200.00	4,749.72	4,384.43	21,334.15

XLVI.—COINAGE OF THE MINTS OF THE UNITED STATES FROM THEIR ORGANIZATION, 1792, TO THE FISCAL YEAR ENDING JUNE 30, 1896.

Denomination.	Pieces.	Value.
GOLD.		
Double eagles	63,884,661	$1,277,693,220.00
Eagles	26,653,827	266,538,270.00
Half eagles	44,126,106	220,631,035.00
Three-dollar pieces (coinage discontinued under act of Sept. 26, 1890)	539,792	1,619,376.00
Quarter eagles	11,478,358	28,711,015.00
Dollars (coinage discontinued under act of Sept. 26, 1890)	19,499,337	19,499,337.00
Total gold	166,182,081	1,814,692,253.00
SILVER.		
Dollars (coinage discontinued, act of Feb. 12, 1873, and resumed under act of Feb. 28, 1878)	438,821,279	438,821,279.00
Trade dollars (coinage authorized Feb. 12, 1873, discontinued Mar. 3, 1887)	35,965,924	35,965,924.00
Half dollars	270,326,721	*a* 135,163,360.50
Quarter dollars	204,704,690	*b* 51,176,172.50
Twenty-cent pieces (coinage discontinued, act of May 2, 1878)	1,355,000	271,000.00
Dimes	289,043,005	28,904,300.50
Half dimes (coinage discontinued, act of Feb. 12, 1873)	97,604,388	4,880,219.40
Three-cent pieces (coinage discontinued, act of Feb. 12, 1873)	42,736,240	1,282,087.20
Total silver	1,380,557,247	696,464,343.10
MINOR.		
Five-cent pieces, nickel	285,844,706	14,292,235.30
Three-cent pieces, nickel (coinage discontinued, act of Sept. 26, 1890)	31,378,316	941,349.48
Two-cent pieces, bronze (coinage discontinued, act of Feb. 12, 1873)	45,601,000	912,020.00
One-cent pieces, copper (coinage discontinued, act of Feb. 21, 1857)	156,288,744	1,562,887.44
One-cent pieces, nickel (coinage discontinued, act of Apr. 22, 1864)	200,772,000	2,007,720.00
One-cent pieces, bronze	807,391,034	8,073,910.34
Half-cent pieces, copper (coinage discontinued, act of Feb. 21, 1857)	7,985,222	39,926.11
Total minor	1,535,261,022	27,830,048.67
Total coinage	3,082,000,350	2,538,986,644.77

Silver-dollar coinage under act of—		
April 2, 1792		$8,031,238
February 28, 1878	$378,166,793	
July 14, 1890	47,544,776	430,790,041
March 31, 1891	5,078,472	
Total		438,821,279

a Includes $2,501,052.50 in Columbian souvenir half dollars.
b Includes $10,005.75 in Columbian souvenir quarter dollars.

XLVII.—COINAGE OF DOLLARS, FRACTIONAL AND SUBSIDIARY SILVER COINS, BY ACTS AND DENOMINATIONS, FROM 1792 TO JUNE 30, 1896.

Denomination.	1792 to 1853.	1853 to Feb. 12, 1873.	Feb. 12, 1873 to June 30, 1896.	Total silver.
Dollars	$2,506,890.00	$5,524,348.00	$430,790,041.00	$438,821,279.00
Trade dollars			35,965,924.00	35,965,924.00
Total dollars	2,506,890.00	5,524,348.00	466,755,965.00	474,787,203.00
Half dollars	66,280,640.50	32,666,832.50	33,714,835.00	132,662,308.00
Half dollars, Columbian			2,501,052.50	2,501,052.50
Quarter dollars	3,994,040.50	17,879,790.50	29,292,335.75	51,166,166.75
Quarter dollars, Columbian			10,005.75	10,005.75
Twenty-cent pieces			271,000.00	271,000.00
Dimes	3,890,230.10	4,908,520.00	20,105,550.40	28,904,300.50
Half dimes	1,825,126.40	3,055,093.00		4,880,219.40
Three-cent pieces	744,927.00	537,160.20		1,282,087.20
Total subsidiary	76,734,964.50	59,047,396.20	85,894,779.40	221,677,140.10
Total silver	79,241,854.50	64,571,744.20	552,650,744.40	696,464,343 10

Fractional silver coinage, 1792 to 1853	$76,734,964.50
Subsidiary silver coinage, 1853 to February 12, 1873	59,047,396.20
Subsidiary silver coinage, February 12, 1873, to December 31, 1895	85,894,779.40
Total	221,677,140.10

XLVIII.—Coinage of the Mints of the United States

[Coinage of the mint at Philadelphia from

Calendar year.	GOLD COINAGE.					
	Double eagles.	Eagles.	Half eagles.	Three dollars.	Quarter eagles.	Dollars.
1793 to 1795		$27,050	$43,535			
1796		60,800	16,995		$165.00	
1797		91,770	32,030		4,390.00	
1798		79,740	124,335		1,535.00	
1799		174,830	37,255		1,200.00	
1800		259,650	58,110			
1801		292,540	130,030			
1802		150,900	265,880		6,530.00	
1803		89,790	167,530		1,057.50	
1804		97,950	152,375		8,317.50	
1805			165,915		4,452.50	
1806			320,465		4,040.00	
1807			420,465		17,030.00	
1808			277,890		6,775.00	
1809			169,375			
1810			501,435			
1811			497,905			
1812			290,435			
1813			477,140			
1814			77,270			
1815			3,175			
1816						
1817						
1818			242,940			
1819			258,615			
1820			1,319,030			
1821			173,205		16,120.00	
1822			88,980			
1823			72,425			
1824			86,700		6,500.00	
1825			145,300		11,085.00	
1826			90,345		1,900.00	
1827			124,565		7,000.00	
1828			140,145			
1829			287,210		8,507.50	
1830			631,755		11,350.00	
1831			702,970		11,300.00	
1832			787,435		11,000.00	
1833			968,150		10,400.00	
1834			3,660,845		293,425.00	
1835			1,857,670		328,505.00	
1836			2,765,735		1,369,965.00	
1837			1,035,605		112,700.00	
1838		72,000	1,432,940		117,575.00	
1839		382,480	590,715		67,552.50	
1840		473,380	686,910		47,147.50	
1841		631,310	79,165			
1842		815,070	137,890		7,057.50	
1843		754,620	3,056,025		251,365.00	

NOTE.—Not susceptible of exact statement by years of actual date of coin, the registry of annual having been invariably completed within the year of the date of coin, as now required.

FROM THEIR ORGANIZATION, BY CALENDAR YEARS.

its organization, 1793, to June 30, 1896.]

SILVER COINAGE.							
Trade dollars.	Dollars.	Half dollars.	Quarter dollars.	Twenty cents.	Dimes.	Half dimes.	Three cents.
.....	$204.791	$161,572.00	.....	.....	.....	$4,320.80	.....
.....	72,920	.....	$1,473.50	.....	$2,213.50	511.50	.....
.....	7,776	1,959.00	63.00	.....	2,526.10	2,226.35	.....
.....	327,536	.....	.....	.....	2,755.00	.....	.....
.....	423,515	.....	.....	.....	.....	.....	.....
.....	220,920	.....	.....	.....	2,176.00	1,200.00	.....
.....	54,454	15,144.50	.....	.....	3,464.00	1,695.50	.....
.....	41,650	14,945.00	.....	.....	1,097.50	650.50	.....
.....	66,064	15,857.50	.....	.....	3,304.00	1,892.50	.....
.....	19,570	78,259.50	1,684.50	.....	826.50	.....	.....
.....	321	105,861.00	30,348.50	.....	12,078.00	780.00	.....
.....	.....	419,788.00	51,531.00	.....	.....	.....	.....
.....	.....	525,788.00	55,166.75	.....	16,500.00	.....	.....
.....	.....	684,300.00	.....	.....	.....	.....	.....
.....	.....	702,905.00	.....	.....	4,471.00	.....	.....
.....	.....	638,138.00	.....	.....	635.50	.....	.....
.....	.....	601,822.00	.....	.....	6,518.00	.....	.....
.....	.....	814,029.50	.....	.....	.....	.....	.....
.....	.....	620,951.50	.....	.....	.....	.....	.....
.....	.....	519,537.50	.....	.....	42,150.00	.....	.....
.....	.....	.....	17,308.00	.....	.....	.....	.....
.....	.....	23,575.00	5,000.75	.....	.....	.....	.....
.....	.....	607,783.50	.....	.....	.....	.....	.....
.....	.....	980,161.00	90,293.50	.....	.....	.....	.....
.....	.....	1,104,000.00	36,000.00	.....	.....	.....	.....
.....	.....	375,561.00	31,861.00	.....	94,258.70	.....	.....
.....	.....	652,898.50	54,212.75	.....	118,651.20	.....	.....
.....	.....	779,786.50	16,020.00	.....	10,000.00	.....	.....
.....	.....	847,100.00	4,450.00	.....	44,000.00	.....	.....
.....	.....	1,752,477.00	.....	.....	.....	.....	.....
.....	.....	1,471,583.00	42,000.00	.....	51,000.00	.....	.....
.....	.....	2,002,090.00	.....	.....	.....	.....	.....
.....	.....	2,746,700.00	1,000.00	.....	121,500.00	.....	.....
.....	.....	1,537,600.00	25,500.00	.....	12,500.00	.....	.....
.....	.....	1,856,078.00	.....	.....	77,000.00	61,500.00	.....
.....	.....	2,782,400.00	.....	.....	51,000.00	62,000.00	.....
.....	.....	2,936,830.00	99,500.00	.....	77,135.00	62,135.00	.....
.....	.....	2,398,500.00	80,000.00	.....	52,250.00	48,250.00	.....
.....	.....	2,603,000.00	39,000.00	.....	48,500.00	68,500.00	.....
.....	.....	3,206,002.00	71,500.00	.....	63,500.00	74,000.00	.....
.....	.....	2,676,003.00	488,000.00	.....	141,000.00	138,000.00	.....
.....	1,000	3,273,100.00	118,000.00	.....	119,000.00	95,000.00	.....
.....	.....	1,814,910.00	63,100.00	.....	104,200.00	113,800.00	.....
.....	.....	1,773,000.00	208,000.00	.....	199,250.00	112,750.00	.....
.....	300	1,667,280.00	122,786.50	.....	105,311.50	53,457.50	.....
.....	61,005	717,504.00	47,031.75	.....	135,858.00	67,204.25	.....
.....	173,000	155,000.00	30,000.00	.....	162,250.00	57,500.00	.....
.....	184,618	1,006,382.00	22,000.00	.....	188,750.00	40,750.00	.....
.....	165,100	1,922,000.00	161,400.00	.....	137,000.00	58,250.00	.....

coinage being of coin delivered by coiners of mints within the given year, and these deliveries not

XLVIII.—Coinage of the Mints of the United States

[Coinage of the mint at Philadelphia from

Calendar year.	GOLD COINAGE.					
	Double eagles.	Eagles.	Half eagles.	Three dollars.	Quarter eagles.	Dollars.
1844	.....	$63,610	$1,701,650	.....	$16,960.00	.....
1845	.....	261,530	2,085,495	.....	227,627.50	.....
1846	.....	200,950	1,979,710	.....	53,995.00	.....
1847	.....	8,622,580	4,579,905	.....	74,535.00	.....
1848	.....	1,454,840	1,303,875	.....	22,215.00	.....
1849	.....	6,536,180	665,350	.....	58,235.00	$688,567
1850	$23,405,220	2,914,510	322,455	.....	632,307.50	481,953
1851	41,743,100	1,763,280	1,887,525	.....	3,431,870.00	3,317,671
1852	41,060,520	2,531,060	2,869,505	.....	2,899,202.50	2,045,351
1853	25,226,520	2,012,530	1,528,850	.....	3,511,670.00	4,076,051
1854	15,157,980	542,500	803,375	$415,854	1,490,645.00	1,639,445
1855	7,293,320	1,217,010	585,490	151,665	588,700.00	758,269
1856	6,597,560	604,900	989,950	78,030	960,600.00	1,762,936
1857	8,787,500	166,060	490,940	62,673	535,325.00	774,789
1858	4,234,280	25,210	75,680	6,399	118,442.50	117,995
1859	871,940	160,930	84,070	46,914	98,610.00	168,244
1860	11,553,400	117,830	99,125	21,465	56,687.50	36,668
1861	59,529,060	1,132,330	3,199,750	18,216	3,181,295.00	527,499
1862	1,842,660	109,950	22,325	17,355	280,882.50	1,326,865
1863	2,855,800	12,480	12,360	15,117	75.00	6,250
1864	4,085,700	35,800	21,100	8,040	7,185.00	5,950
1865	7,024,000	40,050	6,475	3,495	3,862.50	3,725
1866	13,975,500	37,800	33,600	12,090	7,775.00	7,180
1867	5,021,300	31,400	34,600	7,950	8,125.00	5,250
1868	1,972,000	106,550	28,625	14,625	9,062.50	10,525
1869	3,503,100	18,550	8,925	7,575	10,862.50	5,925
1870	3,103,700	25,350	20,175	10,605	11,387.50	6,335
1871	1,603,000	17,800	16,150	3,990	13,375.00	3,930
1872	5,037,600	16,500	8,450	6,090	7,575.00	3,530
1873	34,196,500	8,250	562,525	75	445,062.50	125,125
1874	7,336,000	531,600	17,540	125,460	9,850.00	198,820
1875	5,914,800	1,200	1,100	60	1,050.00	420
1876	11,678,100	7,320	7,385	135	10,552.50	3,245
1877	7,953,400	8,170	5,760	4,464	4,130.00	3,920
1878	10,872,900	738,000	658,700	246,972	715,650.00	3,020
1879	4,152,600	3,847,700	1,509,750	9,090	222,475.00	3,030
1880	1,029,120	16,448,760	15,832,180	3,108	7,490.00	1,636
1881	45,200	38,772,600	28,544,000	1,650	1,700.00	7,660
1882	12,600	23,244,800	12,572,800	4,620	10,100.00	5,040
1883	800	2,087,400	1,167,200	2,820	4,900.00	10,840
1884	1,420	769,050	955,240	3,318	4,982.50	6,206
1885	16,560	2,535,270	3,007,530	2,730	2,217.50	12,205
1886	22,120	2,361,600	1,942,160	3,426	10,220.00	6,016
1887	2,420	536,800	435	18,480	15,705.00	8,543
1888	4,525,320	1,329,960	91,480	15,873	40,245.00	16,080
1889	882,220	44,850	37,825	7,287	44,120.00	30,729
1890	1,519,900	580,430	21,640	.....	22,032.50	.....
1891	28,840	918,680	307,065	.....	27,600.00	.....
1892	90,460	7,975,520	3,767,860	.....	6,362.50	.....
1893	6,886,780	18,408,950	7,640,985	.....	75,265.00	.....
1894	27,379,800	24,707,780	4,789,775	.....	10,305.00	.....
1895	22,293,120	5,678,260	6,729,680	.....	15,297.50	.....
January 1 to June 30, 1896.	12,452,900	280	180	.....	14,712.50	.....
Total	454,778,640	186,878,080	141,289,095	1,357,716	22,787,062.50	18,223,438

[1] Includes Columbian souvenir half dollars, 1892, $475,000.

FROM THEIR ORGANIZATION, BY CALENDAR YEARS—Continued.

its organization, 1793, to June 30, 1896.]

SILVER COINAGE.							
Trade dollars.	Dollars.	Half dollars.	Quarter dollars.	Twenty cents.	Dimes.	Half dimes.	Three cents.
.....	$20,000	$883,000.00	$105,300.00	.....	$7,250.00	$21,500.00	.....
.....	24,500	294,500.00	230,500.00	.....	175,500.00	78,200.00	.....
.....	110,660	1,105,000.00	127,500.00	.....	3,130.00	1,350.00	.....
.....	140,750	578,000.00	183,500.00	.....	24,500.00	63,700.00	.....
.....	15,000	290,000.00	36,500.00	.....	45,150.00	33,400.00	.....
.....	62,600	626,000.00	85,000.00	.....	83,900.00	65,450.00	.....
.....	7,500	113,500.00	47,700.00	.....	193,150.00	47,750.00	.....
.....	1,300	100,375.00	40,000.00	.....	102,650.00	39,050.00	$163,422.00
.....	1,100	38,565.00	44,265.00	.....	153,550.00	50,025.00	559,905.00
.....	46,110	1,766,354.00	3,813,555.00	.....	1,217,301.00	667,251.00	342,000.00
.....	33,140	1,491,000.00	3,095,000.00	.....	447,000.00	287,000.00	20,130.00
.....	26,000	379,750.00	714,250.00	.....	207,500.00	87,500.00	4,170.00
.....	63,500	469,000.00	1,816,000.00	.....	578,000.00	244,000.00	43,740.00
.....	94,000	994,000.00	2,411,000.00	.....	558,000.00	364,000.00	31,260.00
.....	.....	2,113,000.00	1,842,000.00	.....	154,000.00	175,000.00	48,120.00
.....	256,500	374,000.00	336,000.00	.....	43,000.00	17,000.00	10,950.00
.....	218,930	151,850.00	201,350.00	.....	60,700.00	39,950.00	8,610.00
.....	78,500	1,444,200.00	1,213,650.00	.....	192,400.00	164,050.00	14,940.00
.....	12,090	126,175.00	233,137.50	.....	84,755.00	74,627.50	10,906.50
.....	27,660	251,830.00	48,015.00	.....	1,446.00	923.00	643.80
.....	31,170	189,785.00	23,517.50	.....	3,907.00	23.50	14.10
.....	47,000	255,950.00	14,825.00	.....	1,050.00	675.00	255.00
.....	49,625	372,812.50	4,381.25	.....	872.50	536.25	681.75
.....	60,325	212,162.50	5,156.25	.....	662.50	431.25	138.75
.....	182,700	189,100.00	7,500.00	.....	46,625.00	4,295.00	123.00
.....	424,300	397,950.00	4,150.00	.....	25,060.00	10,430.00	153.00
.....	433,000	300,450.00	21,850.00	.....	47,150.00	26,830.00	120.00
.....	1,115,760	582,680.00	42,808.00	.....	75,361.00	74,443.00	127.80
.....	1,106,450	440,775.00	45,737.50	.....	239,645.00	147,397.50	58.50
$397,500	293,600	1,308,750.00	371,075.00	.....	394,710.00	35,630.00	18.00
987,800	.....	1,180,150.00	117,975.00	.....	294,070.00	.....	.....
218,900	.....	3,013,750.00	1,073,375.00	$7,940	1,035,070.00	.....	.....
456,150	.....	4,209,575.00	4,454,287.50	3,180	1,146,115.00	.....	.....
3,039,710	.....	4,152,255.00	2,727,927.50	102	731,051.00	.....	.....
900	10,509,550	689,200.00	565,200.00	120	167,880.00	.....	.....
1,541	14,807,100	2,950.00	3,675.00	.....	1,510.00	.....	.....
1,987	12,601,355	4,877.50	3,738.75	.....	3,735.50	.....	.....
960	9,163,975	5,487.50	3,243.75	.....	2,497.50	.....	.....
1,097	11,101,100	2,750.00	4,075.00	.....	391,110.00	.....	.....
979	12,291,039	4,519.50	3,859.75	.....	767,571.20	.....	.....
.....	14,070,875	2,637.50	2,218.75	.....	336,638.00	.....	.....
.....	17,787,767	3,065.00	3,632.50	.....	253,342.70	.....	.....
.....	19,963,886	2,943.00	1,471.50	.....	637,757.00	.....	.....
.....	20,290,710	2,855.00	2,677.50	.....	1,128,393.90	.....	.....
.....	19,183,833	6,416.50	2,708.25	.....	549,648.70	.....	.....
.....	21,726,811	6,355.50	3,177.75	.....	738,071.10	.....	.....
.....	16,802,590	6,295.00	20,147.50	.....	991,154.10	.....	.....
.....	8,694,206	100,300.00	980,150.00	.....	1,531,060.00	.....	.....
.....	1,037,245	[1]942,622.50	2,059,311.25	.....	1,212,124.50	.....	.....
.....	378,792	[2]2,939,418.50	[3]1,371,203.75	.....	334,079.20	.....	.....
.....	110,972	574,486.00	858,243.00	.....	133,097.20	.....	.....
.....	12,880	917,609.00	1,110,220.00	.....	69,088.00	.....	.....
.....	4,500,412	203,206.00	574,603.00	.....	49,041.20	.....	.....
5,107,524	222,043,348	88,004,430.50	35,126,570.50	11,342	19,887,260.30	3,948,791.90	1,260,487.20

[1] Includes Columbian souvenir half dollars, 1893, $2,026,052.50.

[2] Includes Columbian souvenir quarter dollars, 1893, $10,005.75.

XLVIII.—COINAGE OF THE MINTS OF THE UNITED STATES

[Coinage of the mint at Philadelphia from

Calendar year.	MINOR COINAGE.		
	Five cents.	Three cents.	Two cents.
1793–1795			
1796			
1797			
1798			
1799			
1800			
1801			
1802			
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1843			

FROM THEIR ORGANIZATION, BY CALENDAR YEARS—Continued.

its organization, 1793, to June 30, 1895.]

MINOR COINAGE.		TOTAL COINAGE.			TOTAL VALUE.
Cents.	Half cents.	Gold.	Silver.	Minor.	
$10,660.33	$712.67	$71,485.00	$370,683.80	$11,373.00	$453,541.80
9,747.00	577.40	77,960.00	77,118.50	10,324.40	165,402.90
8,975.10	535.24	128,190.00	14,550.45	9,510.34	152,250.79
9,797.00	.....	205,610.00	330,291.00	9,797.00	545,698.00
9,045.85	60.83	213,285.00	423,515.00	9,106.68	645,906.68
28,221.75	1,057.65	317,760.00	224,296.00	29,279.40	571,335.40
13,628.37	.....	422,570.00	74,758.00	13,628.37	510,956.37
34,351.00	71.83	423,310.00	58,343.00	34,422.83	516,075.83
24,713.53	489.50	258,377.50	87,118.00	25,203.03	370,698.53
7,568.38	5,276.56	258,642.50	100,340.50	12,844.94	371,827.94
9,411.16	4,072.32	170,367.50	149,388.50	13,483.48	333,239.48
3,480.00	1,780.00	324,505.00	471,319.00	5,260.00	801,084.00
7,272.21	2,380.00	437,495.00	597,448.75	9,652.21	1,044,595.96
11,090.00	2,000.00	284,665.00	684,300.00	13,090.00	982,055.00
2,228.67	5,772.86	169,375.00	707,376.00	8,001.53	884,752.53
14,585.00	1,075.00	501,435.00	638,773.50	15,660.00	1,155,868.50
2,180.25	315.70	497,905.00	608,340.00	2,495.95	1,108,740.95
10,755.00	.....	290,435.00	814,029.50	10,755.00	1,115,219.50
4,180.00	.....	477,140.00	620,951.50	4,180.00	1,102,271.50
3,578.30	.....	77,270.00	561,687.50	3,578.30	642,535.80
.....	.....	3,175.00	17,308.00	.....	20,483.00
28,209.82	.....	.....	28,575.75	28,209.82	56,785.57
39,484.00	.....	.....	607,783.50	39,484.00	647,267.50
31,670.00	.....	242,940.00	1,070,454.50	31,670.00	1,345,064.50
26,710.00	.....	258,615.00	1,140,000.00	26,710.00	1,425,325.00
44,075.50	.....	1,319,030.00	501,680.70	44,075.50	1,864,786.20
3,890.00	.....	189,325.00	825,762.45	3,890.00	1,018,977.45
20,723.39	.....	88,980.00	805,806.50	20,723.39	915,509.89
.....	.....	72,425.00	895,550.00	.....	967,975.00
12,620.00	.....	93,200.00	1,752,477.00	12,620.00	1,858,297.00
14,611.00	315.00	156,385.00	1,564,583.00	14,926.00	1,735,894.00
15,174.25	1,170.00	92,245.00	2,002,090.00	16,344.25	2,110,679.25
23,577.32	.....	131,565.00	2,869,200.00	23,577.32	3,024,342.32
22,606.24	3,030.00	140,145.00	1,575,600.00	25,636.24	1,741,381.24
14,145.00	2,435.00	295,717.50	1,994,578.00	16,580.00	2,306,875.50
17,115.00	.....	643,105.00	2,495,400.00	17,115.00	3,155,620.00
33,592.60	11.00	714,270.00	3,175,600.00	33,603.60	3,923,473.60
23,620.00	.....	798,435.00	2,579,000.00	23,620.00	3,401,055.00
27,390.00	770.00	978,550.00	2,759,000.00	28,160.00	3,765,710.00
18,551.00	600.00	3,954,270.00	3,415,002.00	19,151.00	7,388,423.00
38,784.00	705.00	2,186,175.00	3,443,003.00	39,489.00	5,668,667.00
21,110.00	1,990.00	4,135,700.00	3,606,100.00	23,100.00	7,764,900.00
55,583.00	.....	1,148,305.00	2,096,010.00	55,583.00	3,299,898.00
63,702.00	.....	1,622,515.00	2,293,000.00	63,702.00	3,979,217.00
31,286.61	.....	1,040,747.50	1,949,135.50	31,286.61	3,021,169.61
24,627.00	.....	1,207,437.50	1,028,603.00	24,627.00	2,260,667.50
15,973.67	.....	710,475.00	577,750.00	15,973.67	1,304,198.67
23,833.90	.....	960,017.50	1,442,500.00	23,833.90	2,426,351.40
24,283.20	.....	4,062,010.00	2,443,750.00	24,283.20	6,530,043.20

XLVIII.—COINAGE OF THE MINTS OF THE UNITED STATES

[Coinage of the mint at Philadelphia from

Calendar year.	MINOR COINAGE.		
	Five cents.	Three cents.	Two cents.
1844			
1845			
1846			
1847			
1848			
1849			
1850			
1851			
1852			
1853			
1854			
1855			
1856			
1857			
1858			
1859			
1860			
1861			
1862			
1863			
1864			$396,950.00
1865		$341,460.00	272,800.00
1866	$737,125.00	144,030.00	63,540.00
1867	1,545,475.00	117,450.00	58,775.00
1868	1,440,850.00	97,560.00	56,075.00
1869	819,750.00	48,120.00	30,930.00
1870	240,300.00	40,050.00	17,225.00
1871	28,050.00	18,120.00	14,425.00
1872	301,800.00	25,860.00	1,300.00
1873	227,500.00	35,190.00	
1874	176,900.00	23,700.00	
1875	104,850.00	6,840.00	
1876	126,500.00	4,860.00	
1877			
1878	117.50	70.50	
1879	1,455.00	1,236.00	
1880	997.75	748.65	
1881	3,618.75	32,417.25	
1882	573,830.00	759.00	
1883	1,148,471.05	318.27	
1884	563,697.10	169.26	
1885	73,824.50	143.70	
1886	166,514.50	128.70	
1887	763,182.60	238.83	
1888	536,024.15	1,232.49	
1889	794,068.05	646 83	
1890	812,963.60		
1891	841,717.50		
1892	584,982.10		
1893	668,509.75		
1894	270,656.60		
1895	498,994.20		
January 1 to June 30, 1896	239,510.60		
Total	14,292,235.30	941,349.48	912,020.00

FROM THEIR ORGANIZATION, BY CALENDAR YEARS—Continued.

its organization, 1793, to June 30, 1896.]

MINOR COINAGE.		TOTAL COINAGE.			TOTAL VALUE.
Cents.	Half cents.	Gold.	Silver.	Minor.	
$23,987.52	.....	$1,782,220.00	$1,037,050.00	$23,987.52	$2,843,257.52
38,948.04	.....	2,574,652.50	803,200.00	38,948.04	3,416,800.54
41,208.00	.....	2,234,655.00	1,347,580.00	41,208.00	3,623,443.00
61,836.69	.....	13,277,020.00	990,450.00	61,836.69	14,329,306.69
64,157.99	.....	2,780,930.00	420,050.00	64,157.99	3,265,137.99
41,785.00	$199.32	7,948,332.00	922,950.00	41,984.32	8,913,266.32
44,268.44	199.06	27,756,445.50	409,600.00	44,467.50	28,210,513.00
98,897.07	738.36	52,143,446.00	446,797.00	99,635.43	52,689,878.43
50,630.94	.....	51,505,638.50	847,410.00	50,630.94	52,403,679.44
66,411.31	648.47	36,355,621.00	7,852,571.00	67,059.78	44,275,251.78
42,361.56	276.79	20,049,799.00	5,373,270.00	42,638.35	25,465,707.35
15,748.29	282.50	10,594,454.00	1,419,170.00	16,030.79	12,029,654.79
26,904.63	202.15	10,993,976.00	3,214,240.00	27,106.78	14,235,322.78
177,834.56	175.90	10,817,287.00	4,452,260.00	178,010.46	15,447,557.46
246,000.00	.....	4,578,006.50	4,332,120.00	246,000.00	9,156,126.50
364,000.00	.....	1,430,708.00	1,037,450.00	364,000.00	2,832,158.00
205,660.00	.....	11,885,175.50	681,390.00	205,660.00	12,772,225.50
101,000.00	.....	67,588,150.00	3,107,740.00	101,000.00	70,796,890.00
280,750.00	.....	3,600,037.50	541,691.50	280,750.00	4,422,479.00
498,400.00	.....	2,902,082.00	330,517.80	498,400.00	3,730,999.80
529,737.14	.....	4,163,775.00	248,417.10	926,687.14	5,338,879.24
354,292.86	.....	7,081,607.50	319,755.00	968,552.86	8,369,915.36
98,265.00	.....	14,073,945.00	428,909.25	1,042,960.00	15,545,814.25
98,210.00	.....	5,108,625.00	278,876.25	1,819,910.00	7,207,411.25
102,665.00	.....	2,141,387.50	430,343.00	1,697,150.00	4,268,880.50
64,200.00	.....	3,554,937.50	862,643.00	963,000.00	5,380,580.50
52,750.00	.....	3,177,552.50	829,400.00	350,325.00	4,357,277.50
39,295.00	.....	1,658,245.00	1,891,179.80	99,890.00	3,649,314.80
40,420.00	.....	5,079,745.00	1,980,063.50	369,380.00	7,429,188.50
116,765.00	.....	35,337,537.50	2,801,283.00	379,455.00	38,518,275.50
141,875.00	.....	8,219,270.00	2,579,995.00	342,475.00	11,141,740.00
135,280.00	.....	5,918,630.00	5,349,035.00	246,970.00	11,514,635.00
79,440.00	.....	11,706,737.50	10,269,307.50	210,800.00	22,186,845.00
8,525.00	.....	7,979,844.00	10,651,045.50	8,525.00	18,639,414.50
57,998.50	.....	13,235,242.00	11,932,850.00	58,186.50	25,226,278.50
162,312.00	.....	9,744,645.00	14,816,776.00	165,003.00	24,726,424.00
389,649.55	.....	33,322,294.00	12,615,693.75	391,395.95	46,329,383.70
392,115.75	.....	67,372,810.00	9,176,163.75	428,151.75	76,977,125.50
385,811.00	.....	35,849,960.00	11,500,132.00	960,400.00	48,310,492.00
455,981.09	.....	3,273,960.00	13,067,968.45	1,604,770.41	17,946,698.86
232,617.42	.....	1,740,216.50	14,412,369.25	796,483.78	16,949,069.53
117,653.84	.....	5,576,512.50	18,047,807.20	191,622.04	23,815,941.74
176,542.90	.....	4,345,542.00	20,606,057.50	343,186.10	25,294,785.60
452,264.83	.....	582,383.00	21,424,636.40	1,215,686.26	23,222,705.66
374,944.14	.....	6,018,958.00	19,742,606.45	912,200.78	26,673,765.23
488,693.61	.....	1,047,031.00	22,474,415.35	1,283,408.49	24,804,854.84
571,828.54	.....	2,144,002.50	17,820,186.60	1,384,792.14	21,348,981.24
470,723.50	.....	1,282,185.00	11,305,716.00	1,312,441.00	13,900,342,00
376,498.32	.....	11,840,202.50	5,251,303.25	961,480.42	18,052,986.17
466,421.95	.....	33,011,980.00	5,023,523.45	1,134,931.70	39,170,435.15
167,521.32	.....	56,887,660.00	1,676,798.20	438,177.92	59,002,636.12
383,436.36	.....	34,716,357.50	2,109,797.00	882,430.56	37,708,585.06
226,575.72	.....	12,468,072.50	5,327,262.20	466,086.32	18,261,421.02
11,644,517.78	39,926.11	825,314,031.50	375,389,754.40	27,830,048.67	1,228,533,834.57

XLVIII.—COINAGE OF THE MINTS OF THE UNITED STATES

[Coinage of the mint at New Orleans from its organization, 1838, to

Calendar year.	GOLD.						SILVER.
	Double eagles.	Eagles.	Half eagles.	Three dollars.	Quarter eagles.	Dollars.	Dollars.
1838							
1839					$44,452.50		
1840			$152,000		65,500.00		
1841		$25,000	41,750		18,450.00		
1842		274,000	82,000		49,500.00		
1843		1,751,620	505,375		920,005.00		
1844		1,187,000	1,823,000				
1845		475,000	205,000				
1846		817,800	290,000		165,000.00		$59,000
1847		5,715,000	60,000		310,000,00		
1848		358,500					
1849		239,000				$215,000	
1850	$2,820,000	575,000			210,000.00	14,000	40,000
1851	6,300,000	2,630,000	205,000		370,000.00	290,000	
1852	3,800,000	180,000			350,000.00	140,000	
1853	1,420,000	510,000				290,000	
1854	65,000	525,000	230,000	$72,000	382,500.00		
1855	160,000	180,000	55,500			55,000	
1856	45,000	145,000	50,000		52,750.00		
1857	600,000	55,000	65,000		85,000.00		
1858	705,000	200,000					
1859	182,000	23,000					360,000
1860	132,000	111,000					515,000
1861[1]	100,000						
1879	46,500	15,000					2,887,000
1880		92,000					5,305,000
1881		83,500					5,708,000
1882		108,200					6,090,000
1883		8,000					8,725,000
1884							9,730,000
1885							9,185,000
1886							10,710,000
1887							11,550,000
1888		213,350					12,150,000
1889							11,875,000
1890							10,701,000
1891							7,954,529
1892		286,880	50,000				2,744,000
1893		170,000	550,000				300,000
1894		1,075,000	83,000				1,723,000
1895		980,000					450,000
January 1 to June 30, 1896							1,950,000
Total	16,375,500	19,008,850	4,447,625	72,000	3,023,157.50	1,004,000	120,711,529

[1] No coinage from 1862 to 1878, inclusive.

FROM THEIR ORGANIZATION, BY CALENDAR YEARS—Continued.

its suspension, 1861, and from its reopening, 1879, to June 30, 1896.]

SILVER.					TOTAL COINAGE.		TOTAL VALUE.
Half dollars.	Quarter dollars.	Dimes.	Half dimes.	Three cents.	Gold.	Silver.	
.....	.....	$40,243.40	.....	.....	.....	$40,243.40	$40,243.40
$81,488	.....	124,327.20	$54,827.50	.....	$44,452.50	260,642.70	305,095.20
427,550	$106,300	117,500.00	46,750.00	.....	217,500.00	698,100.00	915,600.00
200,500	113,000	200,750.00	40,750.00	.....	85,200 00	555,000.00	640,200.00
478,500	192,250	202,000.00	17,500.00	.....	405,500.00	890,250.00	1,295,750.00
1,134,000	242,000	15,000.00	.....	.....	3,177,000.00	1,391,000.00	4,568,000.00
1,002,500	185,000	.....	11,000.00	.....	3,010,000.00	1,198,500.00	4,208,500.00
1,047,000	.....	23,000.00	.....	.....	680,000.00	1,070,000.00	1,750,000.00
1,152,000	.....	.....	.....	.....	1,272,800.00	1,211,000.00	2,483,800.00
1,292,000	92,000	.....	.....	.....	6,085,000.00	1,384,000.00	7,469,000.00
1,590,000	.....	.....	30,000.00	.....	358,500.00	1,620,000.00	1,978,500.00
1,155,000	.....	30,000.00	7,000.00	.....	454,000.00	1,192,000.00	1,646,000.00
1,228,000	103,000	51,000.00	34,500.00	.....	3,619,000.00	1,456,500.00	5,075,500.00
201,000	22,000	40,000.00	43,000.00	$21,600	9,795,000.00	327,600.00	10.122,600.00
72,000	24,000	43,000.00	13,000.00	.....	4,470,000.00	152,000.00	4,622,000.00
664,000	333,000	110,000.00	118,000.00	.....	2,220,000.00	1,225,000.00	3,445,000.00
2,620,000	371,000	177,000.00	78,000,00	.....	1,274,500.00	3,246,000.00	4,520,500.00
1,844,000	44,000	.....	30,000.00	.....	450,500.00	1,918,000.00	2,368,500.00
1,329,000	242,000	118,000.00	55,000.00	.....	292,750.00	1,744,000.00	2,036,750.00
409,000	295,000	154,000.00	69,000.00	.....	805,000.00	927,000.00	1,732,000.00
3,647,000	130,000	29,000.00	83,000.00	.....	905,000.00	3,889,000.00	4,794,000.00
1,417,000	65,000	48,000.00	28,000.00	.....	205,000.00	1,918,000.00	2,123,000.00
645,000	97,000	4,000.00	53,000.00	.....	243,000.00	1,314,000.00	1,557,000.00
165,000	.....	.....	.....	.....	100,000.00	165,000.00	265,000.00
.....	.....	.....	.....	.....	61,500.00	2,887,000.00	2,948,500.00
.....	.....	.....	.....	.....	92,000.00	5,305,000.00	5,397,000.00
.....	.....	.....	.....	.....	83,500.00	5,708,000.00	5,791,500.00
.....	.....	.....	.....	.....	108,200.00	6 090,000.00	6,198,200.00
.....	.....	.....	.....	.....	8,000.00	8,725,000.00	8,733,000.00
.....	.....	.....	.....	.....	.....	9,730,000.00	9,730,000.00
.....	.....	.....	.....	.....	.....	9,185,000.00	9,185,000.00
.....	.....	.....	.....	.....	.....	10,710,000.00	10,710,000.00
.....	.....	.....	.....	.....	.....	11,550,000.00	11,550,000.00
.....	.....	.....	.....	.....	213,350.00	12,150,000.00	12,363,350.00
.....	.....	.....	.....	.....	....	11,875,000.00	11,875,000.00
.....	.....	.....	.....	.....	.....	10,701,000.00	10,701,000.00
.....	17,000	454,000.00	.....	.....	.....	8,425,529.00	8,425,529.00
195,000	660,000	384,170.00	.....	.....	336,880.00	3,983,170.00	4,320,050.00
694,500	849,000	176,000.00	.....	.....	720,000.00	2,019,500.00	2,739,500.00
1,069,000	713,000	72,000.00	.....	.....	1,158.000.00	3,577,000.00	4,735,000.00
883,000	704,000	44,000.00	.....	.....	980,000.00	2,081,000.00	3,061,000.00
154,000	163,000	.....	.....	.....	.....	2,267,000.00	2,267,000.00
26,797,038	5,762,550	2,656,990.60	812,327.50	21,600	43,931,132.50	156,762,035.10	200,693,167.60

XLVIII.—COINAGE OF THE MINTS OF THE UNITED STATES FROM THEIR ORGANIZATION, BY CALENDAR YEARS—Continued.

[Coinage of the mint at Charlotte, N. C., from its organization, 1838, to its suspension, 1861.]

Calendar year.	GOLD.			TOTAL VALUE.
	Half eagles.	Quarter eagles.	Dollars.	
1838	$64,565	$19,770.00	.....	$84,335.00
1839	117,335	45,432.50	.....	162,767.50
1840	95,140	32,095.00	.....	127,235.00
1841	107,555	25,742.50	.....	133,297.50
1842	137,400	16,842.50	.....	154,242.50
1843	221,765	65,240.00	.....	287,005.00
1844[1]	118,155	29,055.00	.....	147,210.00
1845	.....	.....	.....	.....
1846	64,975	12,020.00	.....	76,995.00
1847	420,755	58,065.00	.....	478,820.00
1848	322,360	41,970.00	.....	364,330.00
1849	324,115	25,550.00	$11,634	361,299.00
1850	317,955	22,870.00	6,966	347,791.00
1851	245,880	37,307.50	41,267	324,454.50
1852	362,870	24,430.00	9,434	396,734.00
1853	327,855	.....	11,515	339,370.00
1854	196,455	18,237.50	4	214,696.50
1855	198,940	9,192.50	9,803	217,935.50
1856	142,285	19,782.50	.....	162,067.50
1857	156,800	.....	13,280	170,080.00
1858	194,280	22,640.00	.....	216,920.00
1859	159,235	.....	5,235	164,470.00
1860	74,065	18,672.50	.....	92,737.50
1861	34,395	.....	.....	34,395.00
Total	4,405,135	544,915.00	109,138	5,059,188.00

[1] Mint burned July 27, 1844.

XLVIII.—COINAGE OF THE MINTS OF THE UNITED STATES FROM THEIR ORGANIZATION, BY CALENDAR YEARS—Continued.

[Coinage of the mint at Dahlonega, Ga., from its organization, 1838, to its suspension, 1861.]

Calendar year.	GOLD.				TOTAL VALUE.
	Half eagles.	Three dollars.	Quarter eagles.	Dollars.	
1838	$102,915				$102,915.00
1839	94,695		$34,185.00		128,880.00
1840	114,480		8,830.00		123,310.00
1841	152,475		10,410.00		162,885.00
1842	298,040		11,607.50		309,647.50
1843	492,260		90,522.50		582,782.50
1844	444,910		43,330.00		488,240.00
1845	453,145		48,650.00		501,795.00
1846	401,470		48,257.50		449,727.50
1847	322,025		39,460.00		361,485.00
1848	237,325		34,427.50		271,752.50
1849	195,180		27,362.50	$21,588	244,130.50
1850	219,750		30,370.00	8,382	258,502.00
1851	313,550		28,160.00	9,882	351,592.00
1852	457,260		10,195.00	6,360	473,815.00
1853	448,390		7,945.00	6,583	462,918.00
1854	282,065	$3,360	4,490.00	2,935	292,760.00
1855	112,160		2,807.50	1,811	116,778.50
1856	98,930		2,185.00	1,460	102,575.00
1857	85,230		5,910.00	3,533	94,673.00
1858	76,810			3,477	80,287.00
1859	51,830		5,610.00	4,952	62,392.00
1860	73,175			1,566	74,741.00
1861	7,985				7,985.00
Total	5,536,055	3,360	494,625.00	72,529	6,106,569.00

XLVIII.—Coinage of the Mints of the United States

[Coinage of the mint at San Francisco

Calendar year.	GOLD.						SILVER.	
	Double eagles.	Eagles.	Half eagles.	Three dollars.	Quarter eagles.	Dollars.	Dollars.	Trade dollars.
1854	$2,829,360	$1,238,260	$1,340	.....	$615	$14,632	.....	.....
1855	17,593,500	90,000	305,000	$19,800	.....	.....	.....	.....
1856	23,795,000	680,000	525,500	103,500	177,800	24,600	.....	.....
1857	19,410,000	260,000	435,000	42,000	170,000	10,000	.....	.....
1858	16,934,200	118,000	93,000	.....	3,000	10,000	.....	.....
1859	12,728,900	70,000	66,100	.....	38,000	15,000	$20,000	.....
1860	10,899,000	50,000	106,000	21,000	89,000	13,000	.....	.....
1861	15,360,000	155,000	90,000	.....	60,000	.....	.....	.....
1862	17,083,460	125,000	47,500	.....	20,000	.....	.....	.....
1863	19,331,400	100,000	85,000	.....	27,000	.....	.....	.....
1864	15,873,200	25,000	19,440	.....	.....	.....	.....	.....
1865	20,850,000	167,000	138,060	.....	58,440	.....	.....	.....
1866	16,845,000	200,000	219,600	.....	97,400	.....	.....	.....
1867	18,415,000	90,000	145,000	.....	70,000	.....	.....	.....
1868	16,750,000	135,000	260,000	.....	85,000	.....	.....	.....
1869	13,735,000	64,300	155,000	.....	73,750	.....	.....	.....
1870	19,640,000	80,000	85,000	.....	40,000	3,000	.....	.....
1871	18,560,000	165,000	125,000	.....	55,000	.....	.....	.....
1872	15,600,000	173,000	182,000	.....	45,000	.....	9,000	.....
1873	20,812,000	120,000	155,000	.....	67,500	.....	700	$703,000
1874	24,280,000	100,000	80,000	.....	.....	.....	.....	2,549,000
1875	24,600,000	.....	45,000	.....	29,000	.....	.....	4,487,000
1876	31,940,000	50,000	20,000	.....	12,500	.....	.....	5,227,000
1877	34,700,000	170,000	133,500	.....	88,500	.....	.....	9,519,000
1878	34,780,000	261,000	723,500	.....	445,000	.....	9,774,000	4,162,000
1879	24,476,000	2,240,000	2,131,000	.....	108,750	.....	9,110,000	.....
1880	16,720,000	5,062,500	6,744,500	.....	.....	.....	8,900,000	.....
1881	14,540,000	9,760,000	4,845,000	.....	.....	.....	12,760,000	.....
1882	22,500,000	1,320,000	4,845,000	.....	.....	.....	9,250,000	.....
1883	23,780,000	380,000	416,000	.....	.....	.....	6,250,000	.....
1884	18,320,000	1,242,500	885,000	.....	.....	.....	3,200,000	.....
1885	13,670,000	2,280,000	6,057,500	.....	.....	.....	1,497,000	.....
1886	.....	8,260,000	16,340,000	.....	.....	.....	750,000	.....
1887	5,660,000	8,170,000	9,560,000	.....	.....	.....	1,771,000	.....
1888	17,192,000	6,487,000	1,469,500	.....	.....	.....	657,000	.....
1889	15,494,000	4,254,000	.....	.....	.....	.....	700,000	.....
1890	16,055,000	.....	.....	.....	.....	.....	8,230,373	.....
1891	25,762,500	.....	.....	.....	.....	.....	5,296,000	.....
1892	18,603,000	1,155,000	1,492,000	.....	.....	.....	1,200,000	.....
1893	19,923,500	1,413,500	1,120,000	.....	.....	.....	100,000	.....
1894	20,971,000	250,000	279,500	.....	.....	.....	1,260,000	.....
1895	22,870,000	490,000	560,000	.....	.....	.....	400,000	.....
January 1 to June 30, 1896	9,373,500	262,500	419,500	.....	.....	.....	1,050,000	.....
Total	789,255,520	57,653,560	61,405,040	186,300	1,861,255	90,232	82,185,073	26,647,000

FROM THEIR ORGANIZATION, BY CALENDAR YEARS—Continued.

from its organization, 1854, to June 30, 1896.]

SILVER.					TOTAL COINAGE.		TOTAL VALUE.
Half dollars.	Quarter dollars.	Twenty cents.	Dimes.	Half dimes.	Gold.	Silver.	
					$4,084,207		$4,084,207.00
$64,975.00	$99,100.00				18,008,300	$164,075.00	18,172,375.00
105,500.00	71,500.00		$7,000.00		25,306,400	184,000.00	25,490,400.00
79,000.00	20,500.00				20,327,000	99,500.00	20,426,500.00
238,000.00	30,250.00		6,000.00		17,158,200	274,250.00	17,432,450.00
283,000.00	20,000.00		6,000.00		12,918,000	329,000.00	13,247,000.00
236,000.00	14,000.00		14,000.00		11,178,000	264,000.00	11,442,000.00
469,750.00	24,000.00		17,250.00		15,665,000	511,000.00	16,176,000.00
676,000.00	16,750.00		18,075.00		17,275,960	710,825.00	17,986,785.00
458,000.00			15,750.00	$5,000	19,543,400	478,750.00	20,022,150.00
329,000.00	5,000.00		23,000.00	4,500	15,917,640	361,500.00	16,279,140.00
337,500.00	10,250.00		17,500.00	6,000	21,213,500	371,250.00	21,584,750.00
527,000.00	7,000.00		13,500.00	6,000	17,362,000	553,500.00	17,915,500.00
598,000.00	12,000.00		14,000.00	6,000	18,720,000	630,000.00	19,350,000.00
580,000.00	24,000.00		26,000.00	14,000	17,230,000	644,000.00	17,874,000.00
328,000.00	19,000.00		45,000.00	11,500	14,028,050	403,500.00	14,431,550.00
502,000.00			5,000.00		19,848,000	507,000.00	20,355,000.00
1,089,000.00	7,725.00		32,000.00	8,050	18,905,000	1,136,775.00	20,041,775.00
290,000.00	20,750.00		19,000.00	41,850	16,000,000	380,600.00	16,380,600.00
116,500.00	39,000.00		45,500.00	16,200	21,154,500	920,900.00	22,075,400.00
197,000.00	98,000.00		24,000.00		24,460,000	2,868,000.00	27,328,000.00
1,600,000.00	170,000.00	$231,000	907,000.00		24,674,000	7,395,000.00	32,069,000.00
2,264,000.00	2,149,000.00		1,042,000.00		32,022,500	10,682,000.00	42,704,500.00
2,678,000.00	2,249,000.00		234,000.00		35,092,000	14,680,000.00	49,772,000.00
6,000.00	35,000.00				36,209,500	13,977,000.00	50,186,500.00
					28,955,750	9,110,000.00	38,065,750.00
					28,527,000	8,900,000.00	37,427,000.00
					29,085,000	12,760,000.00	41,845,000.00
					28,665,000	9,250,000.00	37,915,000.00
					24,576,000	6,250,000.00	30,826,000.00
			56,496.90		20,447,500	3,256,496.90	23,703,996.90
			4,369.00		22,007,500	1,501,369.00	23,508,869.00
			20,652.40		24,600,000	770,652.40	25,370,652.40
			445,445.00		23,390,000	2,216,445.00	25,606,445.00
	304,000.00		172,000.00		25,148,500	1,133,000.00	26,281,500.00
			97,267.80		19,748,000	797,267.80	20,545,267.80
			142,307.60		16,055,000	8,372,680.60	24,427,680.60
	554,000.00		319,611.60		25,762,500	6,169,611.60	31,932,111.60
514,514.00	241,019.75		99,071.00		21,250,000	2,054,604.75	23,304,604.75
370,000.00	363,633.75		249,140.10		22,457,000	1,082,773.75	23,539,773.75
2,024,345.00	662,205.25		2.40		21,500,500	3,946,552.65	25,447,052.65
554,043.00	441,170.25		112,000.00		23,920,000	1,507,213.25	25,427,213.25
192,451.50			20,000.00		10,055,500	1,262,451.50	11,317,951.50
17,707,578.50	7,707,854.00	231,000	4,269,938.70	119,100	910,451,907	138,867,544.20	1,049,319,451.20

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XLVIII.—COINAGE OF THE MINTS OF THE UNITED STATES

[Coinage of the mint at Carson City

Calendar year.	GOLD.			SILVER.	
	Double eagles.	Eagles.	Half eagles.	Dollars.	Trade dollars.
1870	$75,780	$59,080	$38,375	$12,462	.....
1871	293,740	71,850	103,850	1,376	.....
1872	593,000	55,000	84,900	3,150	.....
1873	448,200	45,430	37,080	2,300	$124,500
1874	2,301,700	167,670	105,990	.....	1,373,200
1875	2,223,020	77,150	59,140	.....	1,573,700
1876	2,768,820	46,960	34,455	.....	509,000
1877	851,300	33,320	43,400	.....	534,000
1878	263,600	32,440	45,270	2,212,000	97,000
1879	214,160	17,620	86,405	756,000	.....
1880	.....	111,900	255,085	591,000	.....
1881	.....	240,150	69,430	296,000	.....
1882	782,800	67,640	414,685	1,133,000	.....
1883	1,199,240	120,000	64,790	1,204,000	.....
1884	1,622,780	99,250	82,010	1,136,000	.....
1885	189,000	.....	.....	228,000	.....
1886[1]	.....	.....	.....	.....	.....
1887[1]	.....	.....	.....	.....	.....
1888[1]	.....	.....	.....	.....	.....
1889[2]	618,900	.....	.....	350,000	.....
1890	1,824,180	175,000	269,000	2,309,041	.....
1891	100,000	1,037,320	1,040,000	1,618,000	.....
1892	545,300	400,000	414,840	1,352,000	.....
1893[2]	368,040	140,000	300,000	677,000	.....
Total	17,283,560	2,997,780	3,548,085	13,881,329	4,211,400

[1] Coinage suspended.

[2] Operations resumed October 1, 1889.

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FROM THEIR ORGANIZATION, BY CALENDAR YEARS—Continued.

from its organization, 1870, to June 30, 1893.]

SILVER.				TOTAL COINAGE.		TOTAL VALUE.
Half dollars.	Quarter dollars.	Twenty cents.	Dimes.	Gold.	Silver.	
$27,308.50	$2,085.00	.....	.....	$173,235	$41,855.50	$215,090.50
69,975.00	2,722.50	.....	$2,010.00	469,440	76,083.50	545,523.50
136,000.00	2,275.00	.....	2,400.00	732,900	143,825.00	876,725.00
168,530.00	4,115.50	.....	3,119.10	530,710	302,564.60	833,274.60
29,500.00	.....	.....	1,081.70	2,575,360	1,403,781.70	3,979,141.70
504,000.00	35,000.00	$26,658	464,500.00	2,359,310	2,603,858.00	4,963,168.00
978,000.00	1,236,000.00	2,000	827,000.00	2,850,215	3,552,000.00	6,402,215.00
710,000.00	1,048,000.00	.....	770,000.00	928,020	3,062,000.00	3,990,020.00
31,000.00	249,000.00	.....	20,000.00	341,310	2,609,000.00	2,950,310.00
.....	.....	.....	.....	318,185	756,000.00	1,074,185.00
.....	.....	.....	.....	366,985	591,000.00	957,985.00
.....	.....	.....	.....	309,580	296,000.00	605,580.00
.....	.....	.....	.....	1,264,525	1,133,000.00	2,397,525.00
.....	.....	.....	.....	1,384,030	1,204,000.00	2,588,030.00
.....	.....	.....	.....	1,804,040	1,136,000.00	2,940,040.00
.....	.....	.....	.....	189,000	228,000.00	417,000.00
.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	618,900	350,000.00	968,900.00
.....	.....	.....	.....	2,268,180	2,309,041.00	4,577,221.00
.....	.....	.....	.....	2,177,320	1,618,000.00	3,795,320.00
.....	.....	.....	.....	1,360,140	1,352,000.00	2,712,140.00
.....	.....	.....	.....	808,040	677,000.00	1,485,040.00
2,654,313.50	2,579,198.00	28,658	2,090,110.80	23,829,425	25,445,009.30	49,274,434.30

[3] Coinage suspended from May 23, 1893.

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XLVIII.—Coinage of the Mints of the United States

RECAPITULATION.

Calendar year.	GOLD COINAGE.					
	Double eagles.	Eagles.	Half eagles.	Three dollars.	Quarter eagles.	Dollars.
1793–1795		$27,950	$43,535			
1796		60,800	16,995		$165 00	
1797		91,770	32,030		4,390.00	
1798		79,740	124,335		1,535.00	
1799		174,830	37,255		1,200.00	
1800		259,650	58,110			
1801		292,540	130,030			
1802		150,900	265,880		6,530.00	
1803		89,790	167,530		1,057.50	
1804		97,950	152,375		8,317.50	
1805			165,915		4,452.50	
1806			320,465		4,040.00	
1807			420,465		17,030.00	
1808			277,890		6,775.00	
1809			169,375			
1810			501,435			
1811			497,905			
1812			290,435			
1813			477,140			
1814			77,270			
1815			3,175			
1816						
1817						
1818			242,940			
1819			258,615			
1820			1,319,030			
1821			173,205		16,120.00	
1822			88,980			
1823			72,425			
1824			86,700		6,500.00	
1825			145,300		11,085.00	
1826			90,345		1,900.00	
1827			124,565		7,000.00	
1828			140,145			
1829			287,210		8,507.50	
1830			631,755		11,350.00	
1831			702,970		11,300.00	
1832			787,435		11,000.00	
1833			968,150		10,400.00	
1834			3,660,845		293,425.00	
1835			1,857,670		328,505.00	
1836			2,765,735		1,369,965.00	
1837			1,035,605		112,700.00	
1838		72,000	1,600,420		137,345.00	
1839		382,480	802,745		191,622.50	
1840		473,380	1,048,530		153,572.50	
1841		656,310	380,945		54,602.50	
1842		1,089,070	655,330		85,007.50	
1843		2,506,240	4,275,425		1,327,132.50	
1844		1,250,610	4,087,715		89,345.00	
1845		736,530	2,743,040		276,277.50	

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FROM THEIR ORGANIZATION, BY CALENDAR YEARS—Continued.

RECAPITULATION.

SILVER COINAGE.							
Trade dollars.	Dollars.	Half dollars.	Quarter dollars.	Twenty cents.	Dimes.	Half dimes.	Three cents.
.....	$204,791	$161,572.00	.....	.....	.....	$4,320.80	.....
.....	72,920	.....	$1,473.50	.....	$2,213.50	511.50	.....
.....	7,776	1,959.00	63.00	.....	2,526.10	2,226.35	.....
.....	327,536	.....	.....	.....	2,755.00	.....	.....
.....	423,515	.....	.....	.....	.....	.....	.....
.....	220,920	.....	.....	.....	2,176.00	1,200.00	.....
.....	54,454	15,144.50	.....	.....	3,464.00	1,695.50	.....
.....	41,650	14,945.00	.....	.....	1,097.50	650.50	.....
.....	66,064	15,857.50	.....	.....	3,304.00	1,892.50	.....
.....	19,570	78,259.50	1,684.50	.....	826,50	.....	.....
.....	321	105,861.00	30,348.50	.....	12,078.00	780.00	.....
.....	.....	419,788.00	51,531.00	.....	.....	.....	.....
.....	.....	525,788.00	55,160.75	.....	16,500.00	.....	.....
.....	.....	684,300.00	.....	.....	.....	.....	.....
.....	.....	702,905.00	.....	.....	4,471.00	.....	.....
.....	.....	638,138.00	.....	.....	635.50	.....	.....
.....	.....	601,822.00	.....	.....	6,518.00	.....	.....
.....	.....	814,029.50	.....	.....	.....	.....	.....
.....	.....	620,951.50	.....	.....	.....	.....	.....
.....	.....	519,537.50	.....	.....	42,150.00	.....	.....
.....	.....	.....	17,308.00	.....	.....	.....	.....
.....	.....	23,575.00	5,000.75	.....	.....	.....	.....
.....	.....	607,783.50	.....	.....	.....	.....	.....
.....	.....	980,161.00	90,293.50	.....	.....	.....	.....
.....	.....	1,104,000.00	36,000.00	.....	.....	.....	.....
.....	.....	375,561.00	31,861.00	.....	94,258.70	.....	.....
.....	.....	652,898.50	54,212.75	.....	118,651.20	.....	.....
.....	.....	779,786.50	16,020.00	.....	10,000.00	.....	.....
.....	.....	847,100.00	4,450.00	.....	44,000.00	.....	.....
.....	.....	1,752,477.00	.....	.....	.....	.....	.....
.....	.....	1,471,583.00	42,000.00	.....	51,000.00	.....	.....
.....	.....	2,002,090.00	.....	.....	.....	.....	.....
.....	.....	2,746,700.00	1,000.00	.....	121,500.00	.....	.....
.....	.....	1,537,600.00	25,500.00	.....	12,500.00	.....	.....
.....	.....	1,856,078.00	.....	.....	77,000.00	61,500.00	.....
.....	.....	2,382,400.00	.....	.....	51,000.00	62,000.00	.....
.....	.....	2,936,830.00	99,500.00	.....	77,135.00	62,135.00	.....
.....	.....	2,398,500.00	80,000.00	.....	52,250.00	48,250.00	.....
.....	.....	2,603,000.00	39,000.00	.....	48,500.00	68,500.00	.....
.....	.....	3,206,002.00	71,500.00	.....	63,500.00	74,000.00	.....
.....	.....	2,676,003.00	488,000.00	.....	141,000.00	138,000.00	.....
.....	1,000	3,273,100.00	118,000.00	.....	119,000.00	95,000.00	.....
.....	.....	1,814,910.00	63,100.00	.....	104,200.00	113,800.00	.....
.....	.....	1,773,000.00	208,000.00	.....	239,493.40	112,750.00	.....
.....	300	1,748,768.00	122,786.50	.....	229,638.70	108,285.00	.....
.....	61,005	1,145,054.00	153,331.75	.....	253,358.00	113,954.25	.....
.....	173,000	355,500.00	143,000.00	.....	363,000.00	98,250.00	.....
.....	184,618	1,484,882.00	214,250.00	.....	390,750.00	58,250.00	.....
.....	165,100	3,056,000.00	403,400.00	.....	152,000.00	58,250.00	.....
.....	20,000	1,885,500.00	290,300.00	.....	7,250.00	32,500.00	.....
.....	24,500	1,341,500.00	230,500.00	.....	198,500.00	78,200.00	.....

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XLVIII.—COINAGE OF THE MINTS OF THE UNITED STATES

RECAPITULATION—Continued.

Calendar year.	GOLD COINAGE.					
	Double eagles.	Eagles.	Half eagles.	Three dollars.	Quarter eagles.	Dollars.
1846	.....	$1,018,750	$2,736,155	.....	$279,272.50	.....
1847	.....	14,337,580	5,382,685	.....	482,060.00	.....
1848	.....	1,813,340	1,863,560	.....	98,612.50	.....
1849	.....	6,775,180	1,184,645	.....	111,147.50	$936,789
1850	$26,225,220	3,489,510	860,160	.....	895,547.50	511,301
1851	48,043,100	4,393,280	2,651,955	.....	3,867,337.50	3,658,829
1852	44,860,520	2,811,060	3,689,635	.....	3,283,827.50	2,201,145
1853	26,646,520	2,522,530	2,305,095	.....	3,519,615.00	4,384,149
1854	18,052,340	2,305,760	1,513,235	$491,214	1,896,397.50	1,657,016
1855	25,046,820	1,487,010	1,257,090	171,465	600,700.00	824,883
1856	30,437,560	1,429,900	1,806,665	181,530	1,213,117.50	1,788,996
1857	28,797,500	481,060	1,232,970	104,673	796,235.00	801,602
1858	21,873,480	343,210	439,770	6,399	144,082.50	131,472
1859	13,782,840	253,930	361,235	46,914	142,220.00	193,431
1860	22,584,400	278,850	352,365	42,465	164,360.00	51,234
1861	74,989,060	1,287,330	3,332,130	18,216	3,241,295.00	527,493
1862	18,926,120	234,950	69,825	17,355	300,882.50	1,326,865
1863	22,187,200	112,480	97,360	15,117	27,075.00	6,250
1864	19,958,900	60,800	40,540	8,040	7,185.00	5,950
1865	27,874,060	207,050	144,535	3,495	62,302.50	3,725
1866	30,820,500	237,800	253,200	12,090	105,175.00	7,180
1867	23,436,300	121,400	179,600	7,950	78,125.00	5,250
1868	18,722,000	241,550	288,625	14,625	94,062.50	10,525
1869	17,238,100	82,850	163,925	7,575	84,612.50	5,925
1870	22,819,480	164,430	143,550	10,605	51,387.50	9,335
1871	20,456,740	254,650	245,000	3,990	68,375.00	3,930
1872	21,230,600	244,500	275,350	6,090	52,575.00	3,530
1873	55,456,700	173,080	754,605	75	512,562.50	125,125
1874	33,917,700	799,270	203,530	125,460	9,850.00	198,820
1875	32,737,820	78,350	105,240	60	30,050.00	420
1876	46,386,920	104,280	61,820	135	23,052.50	3,245
1877	43,504,700	211,490	182,660	4,464	92,630.00	3,920
1878	45,916,500	1,031,440	1,427,470	246,972	1,160,650.00	3,020
1879	28,889,260	6,120,320	3,727,155	9,090	331,225.00	3,030
1880	17,749,120	21,715,160	22,831,765	3,108	7,490.00	1,636
1881	14,585,200	48,796,250	33,458,430	1,650	1,700.00	7,660
1882	23,295,400	24,740,640	17,831,885	4,620	10,100.00	5,040
1883	24,980,040	2,595,400	1,647,990	2,820	4,900.00	10,840
1884	19,944,200	2,110,800	1,922,250	3,318	4,982.50	6,206
1885	13,875,560	4,815,270	9,065,030	2,730	2,217.50	12,205
1886	22,120	10,621,600	18,282,160	3,426	10,220.00	6,016
1887	5,662,420	8,706,800	9,560,435	18,480	15,705.00	8,543
1888	21,717,320	8,030,310	1,560,980	15,873	40,245.00	16,080
1889	16,995,120	4,298,850	37,825	7,287	44,120.00	30,729
1890	12,399,080	755,430	290,640	.....	22,032.50	.....
1891	25,891,340	1,956,000	1,347,065	.....	27,600.00	.....
1892	19,238,760	9,817,400	5,724,700	.....	6,362.50	.....
1893	27,178,320	20,132,450	9,610,985	.....	75,265.00	.....
1894	48,350,800	26,032,780	5,152,275	.....	10,305.00	.....
1895	45,163,120	7,148,260	7,289,680	.....	15,297.50	.....
January 1 to June 30, 1896	21,826,400	262,780	419,680	.....	14,712.50	.....
Total	1,277,693,220	266,538,270	220,631,035	1,619,376	28,711,015.00	19,499,337

[1] Includes $475,000 in Columbian coins.

[2] Includes $2,026,052.50 in Columbian coins.

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FROM THEIR ORGANIZATION, BY CALENDAR YEARS—Continued.

RECAPITULATION—Continued.

SILVER COINAGE.							
Trade dollars.	Dollars.	Half dollars.	Quarter dollars.	Twenty cents.	Dimes.	Half dimes.	Three cents.
.....	$169,600	$2,257,000.00	$127,500.00	.....	$3,130.00	$1,350.00	.....
.....	140,750	1,870,000.00	275,500.00	.....	24,500.00	63,700.00	.....
.....	15,000	1,880,000.00	36,500.00	.....	45,150.00	63,400.00	.....
.....	62,600	1,781,000.00	85,000.00	.....	113,900.00	72,450.00	.....
.....	47,500	1,341,500.00	150,700.00	.....	244,150.00	82,250.00	.....
.....	1,300	301,375.00	62,000.00	.....	142,650.00	82,050.00	$185,022.00
.....	1,100	110,565.00	68,265.00	.....	196,550.00	63,025.00	559,905.00
.....	46,110	2,430,354.00	4,146,555.00	.....	1,327,301.00	785,251.00	342,000.00
.....	33,140	4,111,000.00	3,466,000.00	.....	624,000.00	365,000.00	20,130.00
.....	26,000	2,288,725.00	857,350.00	.....	207,500.00	117,500.00	4,170.00
.....	63,500	1,903,500.00	2,129,500.00	.....	703,000.00	299,000.00	43,740.00
.....	94,000	1,482,000.00	2,726,500.00	.....	712,000.00	433,000.00	31,260.00
.....	.....	5,998,000.00	2,002,250.00	.....	189,000.00	258,000.00	48,120.00
.....	636,500	2,074,000.00	421,000.00	.....	97,000.00	45,000.00	10,950.00
.....	733,930	1,032,850.00	312,350.00	.....	78,700.00	92,950.00	8,610.00
.....	78,500	2,078,950.00	1,237,650.00	.....	209,650.00	164,050.00	14,940.00
.....	12,090	802,175.00	249,887.50	.....	102,830.00	74,627.50	10,906.50
.....	27,660	709,830.00	48,015.00	.....	17,190.00	5,923.00	643.80
.....	31,170	518,785.00	28,517.50	.....	26,907.00	4,523.50	14.10
.....	47,000	593,450.00	25,075.00	.....	18,550.00	6,675.00	255.00
.....	49,625	899,812.50	11,381.25	.....	14,372.50	6,536.25	681.75
.....	60,325	810,162.50	17,156.25	.....	14,662.50	6,431.25	138.75
.....	182,700	769,100.00	31,500.00	.....	72,625.00	18,295.00	123.00
.....	424,300	725,950.00	23,150.00	.....	70,660.00	21,930.00	153.00
.....	445,462	829,758.50	23,935.00	.....	52,150.00	26,830.00	120.00
.....	1,117,136	1,741,655.00	53,255.50	.....	109,371.00	82,493.00	127.80
.....	1,118,600	866,775.00	68,762.50	.....	261,045.00	189,247.50	58.50
$1,225,000	296,600	1,593,780.00	414,190.50	.....	443,329.10	51,830.00	18.00
4,910,000	.....	1,406,650.00	215,975.00	.....	319,151.70	.....	.....
6,279,600	.....	5,117,750.00	1,278,375.00	$265,598	2,406,570.00	.....	.....
6,192,150	.....	7,451,575.00	7,839,287.50	5,180	3,015,115.00	.....	.....
13,092,710	.....	7,540,255.00	6,024,927.50	102	1,735,051.00	.....	.....
4,259,900	22,495,550	726,200.00	849,200.00	120	187,880.00	.....	.....
1,541	27,560,100	2,950.00	3,675.00	.....	1,510.00	.....	.....
1,987	27,397,355	4,877.50	3,738.75	.....	3,735.50	.....	.....
960	27,927,975	5,487.50	3,243,75	.....	2,497.50	.....	.....
1,097	27,574,100	2,750.00	4,075.00	.....	391,110.00	.....	.....
979	28,470,039	4,519.50	3,859.75	.....	767,571.20	.....	.....
.....	28,136,875	2,637.50	2,218.75	.....	393,134.90	.....	.....
.....	28,697,767	3,065.00	3,632.50	.....	257,711.70	.....	.....
.....	31,423,886	2,943.00	1,471.50	.....	658,409,40	.....	.....
.....	33,611,710	2,855.00	2,677.50	.....	1,573,838.90	.....	.....
.....	31,990,833	6,416.50	306,708.25	.....	721,648.70	.....	.....
.....	34,651,811	6,355.50	3,177.75	.....	835,338.90	.....	.....
.....	38,043,004	6,295,00	20,147.50	.....	1,133,461.70	.....	.....
.....	23,562,735	100,300.00	1,551,150.00	.....	2,304,671.60	.....	.....
.....	6,333,245	[1] 1,652,136.50	2,960,331.00	.....	1,695,365.50	.....	.....
.....	1,455,792	[2] 4,003,948.50	[3] 2,583,837.50	.....	759,219.30	.....	.....
.....	3,093,972	3,667,831.00	2,233,448.25	.....	205,099.60	.....	.....
.....	862,880	2,354,652.00	2,255,390.25	.....	225,088.00	.....	.....
.....	7,500,412	549,657.50	737,603.00	.....	69,041.20	.....	.....
35,965,924	438,821,279	135,163,369.50	51,176,172.50	271,000	28,904,300.50	4,880,219.40	1,282,087.20

[3] Includes $10,095.75 in Columbian coins.

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XLVIII.—COINAGE OF THE MINTS OF THE UNITED STATES

RECAPITULATION—Continued.

Calendar year.	MINOR COINAGE.		
	Five cents.	Three cents.	Two cents.
1793–1795			
1796			
1797			
1798			
1799			
1800			
1801			
1802			
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1840			
1841			
1842			
1843			
1844			
1845			
1846			

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FROM THEIR ORGANIZATION, BY CALENDAR YEARS—Continued.

RECAPITULATION—Continued.

MINOR COINAGE.		TOTAL COINAGE.			TOTAL VALUE.
Cents.	Half cents.	Gold.	Silver.	Minor.	
$10,660.33	$712.67	$71,485.00	$370,683.80	$11,373.00	$453,541.80
9,747.00	577.40	77,960.00	77,118.50	10,324.40	165,402.90
8,975.10	535.24	128,190.00	14,550.45	9 510.34	152,250.79
9,797.00	.....	205,610.00	330,291.00	9,797.00	545,698.00
9,045.85	60.83	213,285.00	423,515.00	9,106.68	645,906.68
28,221.75	1,057.65	317,760.00	224,296.00	29,279.40	571,335.40
13,628.37	.....	422,570.00	74,758.00	13,628.37	510,956.37
34,351.00	71.83	423,310.00	58,343.00	34,422.83	516,075.83
24,713.53	489.50	258,377.50	87,118.00	25,203.03	370,698.53
7,568.38	5,276.56	258,642.50	100,340.50	12,844.94	371,827.94
9,411.16	4,072.32	170,367.50	149,388.50	13,483.48	333,239.48
3,480.00	1,780.00	324,505.00	471,319.00	5,260.00	801,084.00
7,272.21	2,380.00	437,495.00	597,448.75	9,652.21	1,044,595.96
11,090.00	2,000.00	284,665.00	684,300.00	13,090.00	982,055.00
2,228.67	5,772.86	169,375.00	707,376.00	8,001.53	884,752.53
14,585.00	1,075.00	501,435.00	638,773.50	15,660.00	1,155,868.50
2,180.25	315.70	497,905.00	608,340.00	2,495.95	1,108,740.95
10,755.00	.....	290,435.00	814,029.50	10,755.00	1,115,219.50
4,180.00	.....	477,140.00	620,951.50	4,180.00	1,102,271.50
3,578.30	.....	77,270.00	561,687.50	3,578.30	642,535.80
.....	.....	3,175.00	17,308.00	.....	20,483.00
28,209.82	.....	.....	28,575.75	28,209.82	56,785.57
39,484.00	.....	.....	607,783.50	39,484.00	647,267.50
31,670.00	.....	242,940.00	1,070,454.50	31,670.00	1,345,064.50
26,710.00	.....	258,615.00	1,140,000.00	26,710.00	1,425,325.00
44,075.50	.....	1,319,030.00	501,680.70	44,075.50	1,864,786.20
3,890.00	.....	189,325.00	825,762.45	3,890.00	1,018,977.45
20,723.39	.....	88,930.00	805,806.50	20,723.39	915,509.89
.....	.....	72,425.00	895,550.00	.....	967,975.00
12,620.00	.....	93,200.00	1,752,477.00	12,620.00	1,858,297.00
14,611.00	315.00	156,385.00	1,564,533.00	14,926.00	1,735,894.00
15,174.25	1,170.00	92,245.00	2,002,090.00	16,344.25	2,110,679.25
23,577.32	.....	131,565.00	2,869,200.00	23,577.32	3,024,342.32
22,606.24	3,030.00	140,145.00	1,575,600.00	25,636.24	1,741,381.24
14,145.00	2,435.00	295,717.50	1,994,578.00	16,580.00	2,306,875.50
17,115.00	.....	643,105.00	2,495,400.00	17,115.00	3,155,620.00
33,592.60	11.00	714,270.00	3,175,600.00	33,603.60	3,923,473.60
23,620.00	.....	798,435.00	2,579,000.00	23,620.00	3,401,055.00
27,390.00	770.00	978,550.00	2,759,000.00	28,160.00	3,765,710.00
18,551.00	600.00	3,954,270.00	3,415,002.00	19,151.00	7,388,423.00
38,784.00	705.00	2,186,175.00	3,443,003.00	39,489.00	5,668,667.00
21,110.00	1,900.00	4,135,700.00	3,606,100.00	23,100.00	7,764,900.00
55,583.00	.....	1,148,305.00	2,096,010.00	55,583.00	3,299,898.00
63,702.00	.....	1,809,765.00	2,333,243.40	63,702.00	4,206,710.40
31,286.61	.....	1,376,847.50	2,209,778.20	31,286.61	3,617,912.31
24,627.00	.....	1,675,482.50	1,726,703.00	24,627.00	3,426,812.50
15,973.67	.....	1,091,857.50	1,132,750.00	15,973.67	2,240,581.17
23,833.90	.....	1,829,407.50	2,332,750.00	23,833.90	4,185,991.40
24,283.20	.....	8,108,797.50	3,834,750.00	24,283.20	11,967,830.70
23,987.52	.....	5,427,670.00	2,235,550.00	23,987.52	7,687,207.52
38,948.04	.....	3,756,447.50	1,873,200.00	38,948.04	5,668,595.54
41,208.00	.....	4,034,177.50	2,558,580.00	41,208.00	6,633,965.50

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XLVIII.—COINAGE OF THE MINTS OF THE UNITED STATES

RECAPITULATION—Continued.

Calendar year.	MINOR COINAGE.		
	Five cents.	Three cents.	Two cents.
1847			
1848			
1849			
1850			
1851			
1852			
1853			
1854			
1855			
1856			
1857			
1858			
1859			
1860			
1861			
1862			
1863			
1864			$396,950.00
1865		$341,460.00	272,890.00
1866	$737,125.00	144,030.00	63,540.00
1867	1,545,475.00	117,450.00	58,775.00
1868	1,440,850.00	97,560.00	56,075.00
1869	819,750.00	48,120.00	30,930.00
1870	240,300.00	40,050.00	17,225.00
1871	28,050.00	18,120.00	14,425.00
1872	301,800.00	25,860.00	1,300.00
1873	227,500.00	35,190.00	
1874	176,900.00	23,700.00	
1875	104,850.00	6,840.00	
1876	126,500.00	4,860.00	
1877			
1878	117.50	70.50	
1879	1,455.00	1,236.00	
1880	997.75	748.65	
1881	3,618.75	32,417.25	
1882	573,830.00	759.00	
1883	1,148,471.05	318.27	
1884	563,897.10	169.26	
1885	73,824.50	143.70	
1886	166,514.50	128.70	
1887	763,182.60	238.83	
1888	536,024.15	1,232.49	
1889	794,068.05	646.83	
1890	812,963.60		
1891	841,717.50		
1892	584,982.10		
1893	668,509.75		
1894	270,656.60		
1895	498,994.20		
January 1 to June 30, 1896	239,510.60		
Total	14,292,235.30	941,349.48	912,020.00

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FROM THEIR ORGANIZATION, BY CALENDAR YEARS—Continued.

RECAPITULATION—Continued.

MINOR COINAGE.		TOTAL COINAGE.			TOTAL VALUE.
Cents.	Half cents.	Gold.	Silver.	Minor.	
$61,836.69	.....	$20,202,325.00	$2,374,450.00	$61,836.69	$22,638,611.69
64,157.99	.....	3,775,512.50	2,040,050.00	64,157.99	5,879,720.49
41,785.00	$199.32	9,007,761.50	2,114,950.00	41,984.32	11,164,695.82
44,268.44	199.06	31,981,738.50	1,866,100.00	44,467.50	33,892,306.00
98,897.07	738.36	62,614,492.50	774,397.00	99,635.43	63,488,524.93
50,630.94	.....	56,846,187.50	999,410.00	50,630.94	57,896,228.44
66,411.31	648.47	39,377,909.00	9,077,571.00	67,059.78	48,522,539.78
42,361.56	276.79	25,915,962.50	8,619,270.00	42,638.35	34,577,870.85
15,748.29	282.50	29,387,968.00	3,501,245.00	16,030.79	32,905,243.79
26,904.63	202.15	36,857,768.50	5,142,240.00	27,106.78	42,027,115.28
177,834.56	175.90	32,214,040.00	5,478,760.00	178,010.46	37,870,810.46
246,000.00	.....	22,938,413.50	8,495,370.00	246,000.00	31,679,783.50
364,000.00	.....	14,780,570.00	3,284,450.00	364,000.00	18,429,020.00
205,660.00	.....	23,473,654.00	2,259,390.00	205,660.00	25,938,704.00
101,000.00	.....	83,395,530.00	3,783,740.00	101,000.00	87,280,270.00
280,750.00	.....	20,875,997.50	1,252,516.50	280,750.00	22,409,264.00
498,400.00	.....	22,445,482.00	809,267.80	498,400.00	23,753,149.80
529,737.14	.....	20,081,415.00	609,917.10	926,687.14	21,618,019.24
354,292.86	.....	28,295,107.50	691,005.00	968,552.86	29,954,665.36
98,265.00	.....	31,435,945.00	982,409.25	1,042,960.00	33,461,314.25
98,210.00	.....	23,828,625.00	908,876.25	1,819,910.00	26,557,411.25
102,665.00	.....	19,371,387.50	1,074,343.00	1,697,150.00	22,142,880.50
64,200.00	.....	17,582,987.50	1,266,143.00	903,000.00	19,812,130.50
52,750.00	.....	23,198,787.50	1,378,255.50	350,325.00	24,927,368.00
39,295.00	.....	21,032,685.00	3,104,038.30	99,890.00	24,236,613.30
40,420.00	.....	21,812,645.00	2,504,488.50	369,380.00	24,686,513.50
116,765.00	.....	57,022,747.50	4,024,747.60	379,455.00	61,426,950.10
141,875.00	.....	35,254,630.00	6,851,776.70	342,475.00	42,448,881.70
135,280.00	.....	32,951,940.00	15,347,893.00	246,970.00	48,546,803.00
79,440.00	.....	46,579,452.50	24,503,307.50	210,800.00	71,293,560.00
8,525.00	.....	43,999,864.00	28,393,045.50	8,525.00	72,401,434.50
57,998.50	.....	49,786,052.00	28,518,850.00	58,186.50	78,363,088.50
162,312.00	.....	39,080,080.00	27,569,776.00	165,003.00	66,814,859.00
389,649.55	.....	62,308,279.00	27,411,693.75	391,395.95	90,111,368.70
392,115.75	.....	96,850,890.00	27,940,163.75	428,151.75	125,219,205.50
385,811.00	.....	65,887,685.00	27,973,132.00	960,400.00	94,821,217.00
455,981.09	.....	29,241,990.00	29,246,968.45	1,604,770.41	60,093,728.86
232,617.42	.....	23,991,756.50	28,534,866.15	796,483.78	53,323,106.43
117,653.84	.....	27,773,012.50	28,962,176.20	191,622.04	56,926,810.74
176,542.90	.....	28,945,542.00	32,086,709.90	343,186.10	61,375,438.00
452,264.83	.....	23,972,383.00	35,191,081.40	1,215,686.26	60,379,150.66
374,944.14	.....	31,380,808.00	33,025,606.45	912,200.78	65,318,615.23
488,693.61	.....	21,413,931.00	35,496,683.15	1,283,408.49	58,194,022.64
571,828.54	.....	20,467,182.50	39,202,908.20	1,384,792.14	61,054,882.84
470,723.50	.....	29,222,005.00	27,518,856.60	1,312,441.00	58,053,302.60
376,498.32	.....	34,787,222.50	12,641,078.00	961,480.42	48,389,780.92
466,421.95	.....	56,997,020.00	8,802,797.30	1,134,931.70	66,934,749.00
167,521.32	.....	79,546,160.00	9,200,350.85	438,177.92	89,184,688.77
383,436.36	.....	59,616,357.50	5,698,010.25	882,430.56	66,196,798.31
226,575.72	.....	22,523,572.50	8,856,713.70	466,086.32	31,846,372.52
11,644,517.78	39,926.11	1,814,692,253.00	696,464,343.10	27,830,048.67	2,538,986,644.77

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XLIX.—IMPORTS AND EXPORTS OF THE PRECIOUS METALS OF THE PRINCIPAL COUNTRIES OF THE WORLD.

TABLES SHOWING THE VALUE OF THE GOLD AND SILVER COIN AND BULLION IMPORTED INTO AND EXPORTED FROM THE PRINCIPAL COUNTRIES OF THE WORLD, ALSO THE EXCESS OF IMPORTS OVER EXPORTS OR EXPORTS OVER IMPORTS, FOR A SERIES OF YEARS.

UNITED STATES.

Value of GOLD COIN and BULLION imported into and exported from the United States, fiscal years 1825–1896.

Year ending—	Imports.	Exports.	Excess of imports over exports.	Excess of exports over imports.
September 30—				
1825	$529,277	$315,672	$213,605	
1826	678,740	1,056,088		$377,348
1827	1,110,448	1,872,489		762,041
1828	808,220	1,635,084		826,864
1829	816,666	1,573,258		756,592
1830	821,146	1,422,664		601,518
1831	932,029	2,979,529		2,047,500
1832	716,686	2,049,406		1,332,720
1833	611,852	889,505		277,653
1834	3,766,172	690,180	3,075,992	
1835	2,325,196	1,355,280	969,916	
1836	7,231,862	647,455	6,584,407	
1837	2,431,814	3,213,735		781,921
1838	11,674,883	1,213,204	10,461,679	
1839	1,164,580	4,800,668		3,636,088
1840	3,085,157	3,703,373		618,216
1841	1,269,449	3,589,869		2,320,420
1842	757,294	2,304,756		1,547,462
June 30—				
1843 *a*	17,066,437	407,687	16,658,750	
1844	1,613,304	1,366,521	246,783	
1845	818,850	3,055,425		2,236,575
1846	910,413	2,053,199		1,142,786
1847	21,574,931	1,037,921	20,537,010	
1848	3,408,755	11,071,197		7,662,442
1849	4,068,647	1,972,233	2,096,414	
1850	1,776,706	4,560,627		2,783,921
1851	3,569,090	22,836,913		19,267,823
1852	3,658,059	40,073,979		36,415,920
1853	2,427,356	25,442,858		23,015,502
1854	3,212,719	40,554,464		37,341,745
1855	1,092,802	55,109,215		54,016,413
1856	990,305	45,000,977		44,010,672
1857	6,654,636	65,232,653		58,578,017
1858	11,566,068	50,002,804		38,436,736
1859	2,125,397	61,108,053		58,982,656
1860	2,508,786	58,446,039		55,937,253
1861	42,291,930	27,423,973	14,867,957	
1862	13,907,011	35,439,903		21,532,892
1863	5,530,538	62,162,838		56,632,300
1864	11,176,769	100,661,634		89,484,865
1865	6,498,228	58,381,033		51,882,805
1866	8,196,261	71,197,309		63,001,048
1867	17,024,866	39,026,627		22,001,761
1868	8,737,443	73,396,344		64,658,901
1869	14,132,568	36,003,498		21,870,930
1870	12,056,950	33,635,962		21,579,012
1871	6,883,561	66,686,208		59,802,647
1872	8,717,458	49,548,760		40,831,302
1873	8,682,447	44,856,715		36,174,268
1874	19,503,127	34,042,420		14,539,283
1875	13,696,793	66,980,977		53,284,184
1876	7,992,709	31,177,050		23,184,341
1877	26,246,234	26,590,374		344,140
1878	13,330,215	9,204,455	4,125,760	
1879	5,624,948	4,587,614	1,037,334	
1880	80,758,396	3,639,025	77,119,371	
1881	100,031,259	2,565,132	97,466,127	
1882	34,377,054	32,587,880	1,789,174	
1883	17,734,149	11,600,888	6,133,261	
1884	22,831,317	41,081,957		18,250,640

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Value of GOLD COIN and BULLION imported into and exported from the United States, fiscal years 1825–1896—Continued.

Year eading—	Imports.	Exports.	Excess of imports over exports.	Excess of exports over imports.
June 30—				
1885	$26,691,696	$8,477,892	$18,213,804	
1886	20,743,349	42,952,191		$22,208,842
1887	42,910,601	9,701,187	33,209,414	
1888	43,934,317	18,376,234	25,558,083	
1889	10,372,145	60,033,246		49,661,101
1890	13,097,146	17,350,193		4,253,047
1891	18,516,112	86,462,880		67,946,768
1892	50,162,879	50,305,533		142,654
1893	22,069,380	108,966,655		86,897,275
1894	72,989,563	77,162,228		4,172,665
1895	36,384,760	66,502,136		30,117,376
1896	33,507,853	112,412,465		78,904,612
Total	1,027,116,774	2,145,826,396	340,364,841	1,459,074,463

NOTE.—There were no exports of domestic gold previous to 1826, the exports of domestic gold not being separately stated from 1826 to 1861, and in 1863 were included in the exports of domestic silver by the Bureau of Statistics (Statistical Abstracts, 1879–1891). In the Abstracts for 1892-93 this item is omitted entirely, while in the Abstracts for 1894-95 it is included in the gold exports, with the following note appended: "Gold and silver can not be separately stated prior to 1864, but it is probable that the greater portion of the exports was gold."

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Value of SILVER COIN and BULLION imported into and exported from the United States, fiscal years 1821–1896.

Year ending—	Imports.	Exports.	Excess of imports over exports.	Excess of exports over imports.
September 30—				
1821	$8,064,890	$10,478,059		$2,413,169
1822	3,369,846	10,810,180		7,440,334
1823	5,097,896	6,372,987		1,275,091
1824	8,378,970	7,014,552	$1,364,418	
1825	5,621,488	8,481,383		2,859,895
1826	6,202,226	3,648,475	2,553,751	
1827	7,040,682	6,142,391	898,291	
1828	6,681,521	6,608,392	73,129	
1829	6,586,946	3,350,762	3,236,184	
1830	7,334,818	756,109	6,578,709	
1831	6,373,916	6,035,402	338,514	
1832	5,190,818	3,606,934	1,583,884	
1833	6,458,516	1,722,196	4,736,320	
1834	14,145,460	1,386,578	12,758,882	
1835	10,806,251	5,122,495	5,683,756	
1836	6,169,019	3,676,881	2,492,138	
1837	8,084,600	2,762,514	5,322,086	
1838	6,072,233	2,294,842	3,777,391	
1839	4,430,596	3,976,075	454,521	
1840	5,797,656	4,713,641	1,084,015	
1841	3,719,184	6,444,463		2,725,279
1842	3,329,722	2,508,783	820,939	
June 30—				
1843 *a*	5,253,898	1,113,104	4,140,794	
1844	4,217,125	4,087,693	129,432	
1845	3,251,392	5,551,070		2,299,678
1846	2,867,319	1,852,069	1,015,250	
1847	2,546,358	869,103	1,677,255	
1848	2,951,529	4,770,419		1,818,890
1849	2,582,593	3,432,415		849,822
1850	2,852,086	2,962,367		110,281
1851	1,884,413	6,635,839		4,751,426
1852	1,846,985	2,600,156		753,171
1853	1,774,026	2,044,017		269,991
1854	3,726,623	727,040	2,999,583	
1855	2,567,010	1,138,128	1,428,882	
1856	3,217,327	744,508	2,472,819	
1857	5,807,163	3,904,269	1,902,894	
1858	7,708,428	2,630,343	5,078,085	
1859	5,309,392	2,779,358	2,530,034	
1860	6,041,349	8,100,200		2,058,851
1861	4,047,681	2,367,107	1,680,574	
1862	2,508,041	1,447,737	1,060,304	
1863	4,053,567	1,993,773	2,059,794	
1864	1,938,843	4,734,907		2,796,064
1865	3,311,844	9,262,193		5,950,349
1866	2,503,831	14,846,762		12,342,931
1867	5,045,609	21,841,745		16,796,136
1868	5,450,925	21,387,758		15,936,833
1869	5,675,308	21,134,882		15,459,574
1870	14,362,229	24,519,704		10,157,475
1871	14,386,463	31,755,780		17,369,317
1872	5,026,231	30,328,774		25,302,543
1873	12,798,490	39,751,859		26,953,369
1874	8,951,769	32,587,985		23,636,216
1875	7,203,924	25,151,165		17,947,241
1876	7,943,972	25,329,252		17,385,280
1877	14,528,180	29,571,863		15,043,683
1878	16,491,099	24,535,670		8,044,571
1879	14,671,052	20,409,827		5,738,775
1880	12,275,914	13,503,894		1,227,980
1881	10,544,238	16,841,715		6,297,477
1882	8,095,336	16,829,599		8,734,263
1883	10,755,242	20,219,445		9,464,203
1884	14,594,945	26,051,426		11,456,481
1885	16,550,627	33,753,633		17,203,006
1886	17,850,307	29,511,219		11,660,912
1887	17,260,191	26,296,504		9,036,313
1888	20,514,232	28,146,510		7,632,278
1889	24,682,380	36,716,783		12,034,403
1890	27,524,147	36,069,602		8,545,455
1891	26,278,916	23,533,551	2,745,365	
1892	28,764,734	33,800,562		5,035,828
1893	34,293,999	41,947,812		7,653,813
1894	19,965,713	51,007,072		31,041,359
1895	20,211,179	47,842,968		27,631,789
1896	27,314,015	60,576,273		33,262,258
Total	699,737,443	1,089,463,503	84,677,993	474,404,053

a Nine months.

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AUSTRALASIA.

Value of GOLD COIN and BULLION imported into and exported from Australasia from 1851 to 1895.

Years.	Imports.	Exports.	Excess of imports over exports.	Excess of exports over imports.
1851		$4,365,251		$4,365,251
1852		46,105,221		46,105,221
1853		50,640,799		50,640,799
1854		49,925,424		49,925,424
1855		53,857,556		53,857,556
1856		61,050,243		61,050,243
1857		55,137,445		55,137,445
1858		55,575,430		55,575,430
1859		56,650,927		56,650,927
1860		49,575,036		49,575,036
1861		53,127,581		53,127,581
1862		50,884,124		50,884,124
1863		55,813,889		55,813,889
1864		43,925,029		43,925,029
1865		46,397,211		46,397,211
1866		46,805,997		46,805,997
1867		42,815,467		42,815,467
1868		45,506,642		45,506,642
1869		50,528,870		50,528,870
1870		40,090,227		40,090,227
1871		37,009,733		37,009,733
1872		36,970,801		36,970,801
1873		45,024,858		45,024,858
1874		36,615,546		36,615,546
1875		33,423,122		33,423,122
1876		27,247,534		27,247,534
1877		36,527,949		36,527,949
1878		28,542,023		28,542,023
1879		13,193,081		13,193,081
1880		22,059,845		22,059,845
1881		33,014,336		33,014,336
1882		26,931,211		26,931,211
1883		24,765,619		24,765,619
1884		5,732,737		5,732,737
1885		25,612,390		25,612,390
1886		16,429,304		16,429,304
1887		9,251,217		9,251,217
1888		16,346,574		16,346,574
1889		25,821,649		25,821,649
1890		27,364,330		27,364,330
1891		31,004,472		31,004,472
1892		20,148,254		20,148,254
1893	$15,216,226	24,431,771		9,215,545
1894		26,106,806		26,106,806
1895		25,300,685		25,300,685
Total	15,216,226	1,613,654,216		1,598,437,990

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GREAT BRITAIN AND IRELAND.

Value of GOLD COIN and BULLION imported into and exported from Great Britain and Ireland from 1858 to 1895.

Years.	Imports.	Exports.	Excess of imports over exports.	Excess of exports over imports.
1858	$110,922,748	$61,157,500	$49,765,248	
1859	108,511,747	87,991,863	20,519,884	
1860	61,243,365	76,119,739		$14,876,374
1861	59,195,799	59,071,387	124,412	
1862	96,861,375	77,922,217	18,939,158	
1863	93,157,779	74,473,407	18,684,372	
1864	82,248,478	64,625,850	17,622,628	
1865	70,494,026	41,332,800	29,161,226	
1866	114,409,668	62,009,230	52,400,438	
1867	76,891,474	38,393,911	38,497,563	
1868	83,393,205	61,845,954	21,547,251	
1869	67,015,657	41,237,256	25,778,401	
1870	91,522,942	48,730,800	42,792,142	
1871	105,208,494	100,728,155	4,480,339	
1872	89,881,539	96,108,100		6,226,561
1873	100,304,234	92,810,092	7,494,142	
1874	87,991,279	51,787,522	36,203,757	
1875	112,614,868	90,751,932	21,862,936	
1876	114,245,832	80,373,888	33,871,944	
1877	75,148,420	99,088,685		23,940,265
1878	101,570,717	72,844,239	28,726,478	
1879	65,058,657	85,547,318		20,488,661
1880	46,012,081	57,564,962		11,552,881
1881	48,484,969	75,425,090		26,940,121
1882	69,963,524	58,513,842	11,449,682	
1883	37,743,601	34,510,128	3,233,473	
1884	52,287,662	58,460,481		6,172,819
1885	65,097,034	58,061,325	7,035,709	
1886	65,173,415	67,078,405		1,904,990
1887	48,447,594	45,373,368	3,074,226	
1888	76,830,297	72,725,672	4,104,625	
1889	87,178,671	70,346,805	16,831,866	
1890	114,693,910	69,623,497	45,070,413	
1891	147,472,002	117,634,800	29,837,202	
1892	103,413,125	75,187,425	28,225,700	
1893	120,978,231	94,959,241	26,018,990	
1894	134,590,674	76,208,306	58,292,368	
1895	176,197,803	104,094,683	72,103,120	
Total	3,362,456,896	2,700,809,875	773,749,693	112,102,672

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Value of SILVER COIN and BULLION imported into and exported from Great Britain and Ireland from 1858 to 1895.

Years.	Imports.	Exports.	Excess of imports over exports.	Excess of exports over imports.
1858	$32,605,861	$34,366,425	.....	$1,760,564
1859	71,890,166	85,687,697	.....	13,797,531
1860	50,580,026	48,145,209	$2,434,817	.....
1861	32,036,695	46,588,348	.....	14,551,653
1862	57,194,865	64,793,691	.....	7,598,826
1863	52,987,080	54,702,725	.....	1,715,645
1864	52,691,177	47,947,488	4,743,689	.....
1865	33,951,823	32,114,968	1,836,855	.....
1866	52,448,694	43,295,070	9,153,624	.....
1867	39,033,651	31,318,297	7,715,354	.....
1868	37,551,948	36,555,717	996,231	.....
1869	32,752,416	38,463,984	.....	5,711,568
1870	51,823,066	43,341,871	8,481,195	.....
1871	80,403,841	63,568,150	16,835,691	.....
1872	54,205,851	51,521,368	2,684,483	.....
1873	63,206,423	47,828,278	15,378,145	.....
1874	59,849,039	59,429,489	419,550	.....
1875	49,268,227	43,699,934	5,568,293	.....
1876	66,078,646	63,013,067	3,065,579	.....
1877	105,655,676	94,588,861	11,066,815	.....
1878	56,215,594	57,025,837	.....	810,243
1879	52,494,269	53,561,156	.....	1,066,887
1880	33,087,441	34,360,804	.....	1,273,363
1881	33,585,673	34,084,878	.....	499,205
1882	44,980,695	43,630,382	1,350,313	.....
1883	46,076,032	45,369,630	706,402	.....
1884	46,881,403	48,598,733	.....	1,717,330
1885	45,908,639	47,946,155	.....	2,037,516
1886	36,360,731	35,154,131	1,206,600	.....
1887	37,853,295	37,994,732	.....	141,437
1888	30,240,139	37,060,480	.....	6,820,341
1889	44,700,749	51,907,607	.....	7,206,858
1890	50,541,810	52,866,658	.....	2,324,848
1891	63,663,246	64,993,889	.....	1,330,643
1892	60,222,938	68,495,988	.....	8,273,050
1893	72,912,463	68,219,872	4,692,591	.....
1894	65,431,903	60,979,318	4,452,585	.....
1895	60,428,333	52,209,705	8,218,628	.....
Total	1,957,800,524	1,925,430,592	111,007,440	78,637,508

NOTE.—The imports and exports of gold and silver were not registered at the custom-house before 1858.

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INDIA.

Value of GOLD COIN and BULLION imported into and exported from India from 1835 to 1896.

Fiscal years.	Imports.	Exports.	Excess of imports over exports.	Excess of exports over imports.
1835–36	$1,622,486	$16,940	$1,605,546	
1836–37	2,052,174	9,587	2,042,587	
1837–38	2,251,184	154,355	2,096,829	
1838–39	1,297,073	37,015	1,260,058	
1839–40	1,125,247	22,288	1,102,959	
1840–41	671,012	2,783	668,229	
1841–42	809,591	3,587	806,004	
1842–43	1,033,844	6,229	1,027,615	
1843–44	1,980,850	2,506	1,978,344	
1844–45	3,501,218	45,516	3,455,702	
1845–46	2,686,142	36,450	2,649,692	
1846–47	4,150,341	28,664	4,121,677	
1847–48	5,103,878	47,020	5,056,858	
1848–49	6,821,607	257,097	6,564,510	
1849–50	5,642,940	207,094	5,435,846	
1850–51	5,622,316	9,811	5,612,505	
1851–52	6,515,163	346,324	6,168,839	
1852–53	6,526,532	821,529	5,705,003	
1853–54	5,249,532	84,020	5,165,512	
1854–55	4,295,762	736,939	3,558,823	
1855–56	12,206,900	10,259	12,196,641	
1856–57	10,589,514	412,621	10,176,893	
1857–58	13,772,604	228,779	13,543,825	
1858–59	21,594,310	52,977	21,541,333	
1859–60	20,867,732	18,508	20,849,224	
1860–61	20,645,839	48,042	20,597,797	
1861–62	25,257,767	29,233	25,228,534	
1862–63	33,489,045	162,590	33,326,455	
1863–64	43,434,417	131,912	43,302,505	
1864–65	48,055,743	170,659	47,885,084	
1865–66	31,013,698	3,155,525	27,858,173	
1866–67	22,295,723	3,597,143	18,698,580	
1867–68	23,242,144	810,062	22,432,082	
1868–69	25,193,763	85,768	25,107,995	
1869–70	27,692,321	578,283	27,114,038	
1870–71	13,541,486	2,435,454	11,106,032	
1871–72	17,391,790	41,043	17,350,747	
1872–73	12,761,768	384,496	12,377,272	
1873–74	8,023,918	1,295,311	6,728,607	
1874–75	10,167,256	1,049,709	9,117,547	
1875–76	8,936,648	1,417,358	7,519,290	
1876–77	7,025,824	6,016,755	1,009,069	
1877–78	7,683,847	5,405,698	2,278,149	
1878–79	7,119,933	11,481,159		$4,361,226
1879–80	9,978,237	1,459,398	8,518,839	
1880–81	17,870,070	82,044	17,788,026	
1881–82	23,633,531	60,383	23,573,148	
1882–83	24,795,464	799,390	23,996,074	
1883–84	26,617,111	33,831	26,583,280	
1884–85	23,252,973	516,997	22,735,976	
1885–86	15,044,974	1,599,152	13,445,822	
1886–87	13,789,410	3,194,823	10,594,587	
1887–88	15,748,251	1,185,343	14,562,908	
1888–89	15,179,040	1,485,031	13,694,009	
1889–90	24,678,152	2,217,780	22,460,372	
1890–91	30,794,441	4,095,894	26,698,547	
1891–92	19,511,366	8,077,234	11,434,132	
1892–93	8,440,334	21,764,013		13,323,679
1893–94	14,905,113	11,868,540	3,036,573	
1894–95	8,319,498	31,881,782		23,562,284
1895–96	23,823,648	11,858,212	11,965,436	
Total	857,344,495	144,074,945	754,516,739	41,247,189

NOTE.—Rupee calculated at coining rate, $0.4737.

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Value of SILVER COIN and BULLION imported into and exported from India from 1835 to 1896.

Fiscal years.	Imports.	Exports.	Excess of imports over exports.	Excess of exports over imports.
1835-36	$8,923,570	$1,079,278	$7,844,292	.....
1836-37	8,014,347	1,498,677	6,515,670	.....
1837-38	10,779,395	1,207,261	9,572,134	.....
1838-39	13,871,374	998,849	12,872,525	.....
1839-40	9,426,517	1,394,500	8,032,017	.....
1840-41	8,309,466	1,488,239	6,821,227	.....
1841-42	8,166,405	1,921,576	6,244,829	.....
1842-43	15,743,181	1,375,107	14,368,074	.....
1843-44	23,085,410	5,101,542	17,983,868	.....
1844-45	15,456,238	5,778,905	9,677,333	.....
1845-46	9,252,954	5,006,981	4,245,973	.....
1846-47	10,156,785	3,449,536	6,707,249	.....
1847-48	4,487,813	6,892,794	.....	$2,404,981
1848-49	13,619,523	12,091,909	1,527,614	.....
1849-50	10,880,481	4,682,473	6,198,008	.....
1850-51	12,927,847	2,624,372	10,303,475	.....
1851-52	18,070,677	4,126,417	13,944,260	.....
1852-53	26,718,190	4,287,840	22,430,350	.....
1853-54	18,349,834	7,128,931	11,220,903	.....
1854-55	5,572,809	5,428,761	144,048	.....
1855-56	42,790,127	2,912,201	39,877,926	.....
1856-57	59,554,743	5,666,786	53,887,957	.....
1857-58	63,193,118	3,729,608	59,463,510	.....
1858-59	40,779,771	3,169,795	37,609,976	.....
1859-60	58,733,428	4,483,813	54,249,615	.....
1860-61	31,313,981	5,385,269	25,928,712	.....
1861-62	47,504,340	3,285,374	44,218,966	.....
1862-63	66,317,742	5,242,194	61,075,548	.....
1863-64	68,312,034	6,036,407	62,275,627	.....
1864-65	55,907,812	6,859,332	49,048,480	.....
1865-66	98,227,383	7,376,154	90,851,229	.....
1866-67	42,121,504	8,236,064	33,885,440	.....
1867-68	34,062,580	6,839,866	27,222,714	.....
1868-69	48,562,804	6,706,037	41,856,767	.....
1869-70	40,218,703	4,594,463	35,624,240	.....
1870-71	12,955,596	8,371,840	4,583,756	.....
1871-72	38,932,000	7,142,562	31,789,438	.....
1872-73	9,310,588	5,932,750	3,377,838	.....
1873-74	20,165,316	8,019,505	12,145,811	.....
1874-75	29,451,085	6,859,818	22,591,267	.....
1875-76	16,859,016	929,015	15,930,001	.....
1876-77	48,628,015	13,594,568	35,033,447	.....
1877-78	76,776,337	5,354,123	71,422,214	.....
1878-79	27,221,736	7,898,329	19,323,407	.....
1879-80	46,742,742	8,444,351	38,298,391	.....
1880-81	25,871,073	6,927,463	18,943,610	.....
1881-82	31,468,682	5,291,345	26,177,337	.....
1882-83	40,674,314	4,271,789	36,402,525	.....
1883-84	36,053,494	4,882,559	31,170,935	.....
1884-85	44,288,435	9,072,616	35,215,819	.....
1885-86	60,277,734	3,794,079	56,483,655	.....
1886-87	40,001,467	5,177,956	34,823,511	.....
1887-88	51,535,276	6,623,306	44,911,970	.....
1888-89	52,197,456	7,198,493	41,998,963	.....
1889-90	60,288,509	7,059,335	53,229,174	.....
1890-91	73,109,219	5,961,600	67,147,619	.....
1891-92	50,229,883	7,491,797	42,738,086	.....
1892-93	72,135,135	11,200,409	60,934,726	.....
1893-94	72,375,327	7,197,650	65,177,677	.....
1894-95	37,466,965	7,085,220	30,381,745	.....
1895-96	39,500,498	8,320,510	31,179,988	.....
Total	2,163,928,784	338,190,299	1,828,143,466	2,404,981

NOTE.—Rupee calculated at coining rate, $0.4737.

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FRANCE.

Value of GOLD COIN and BULLION imported into and exported from France from 1815 to 1895.

Years.	Imports.	Exports.	Excess of imports over exports.	Excess of exports over imports.
1815–1821*a*	$424,214,000	$522,837,000		$98,623,000
1822–1836*a*	1,146,420,000	1,186,950,000		40,530,000
1837–1852*a*	1,587,232,000	1,198,144,000	$389,088,000	
1853	61,525,891	5,737,504	55,788,387	
1854	92,774,135	12,462,589	80,311,546	
1855	73,515,630	31,394,731	42,120,899	
1856	89,745,193	17,321,364	72,423,829	
1857	109,757,556	23,713,910	86,043,646	
1858	106,837,852	12,826,587	94,011,265	
1859	140,274,330	36,181,131	104,093,199	
1860	90,802,254	30,644,347	60,157,907	
1861	47,099,141	51,679,803		4,580,662
1862	77,552,611	45,700,277	31,852,334	
1863	71,358,469	69,047,101	2,311,368	
1864	89,551,228	65,398,822	24,152,406	
1865	80,944,200	51,835,168	29,109,032	
1866	156,967,479	67,173,843	89,793,636	
1867	114,570,976	35,696,894	78,874,082	
1868	95,234,885	54,152,326	41,082,559	
1869	87,737,028	34,790,566	52,946,462	
1870	59,896,006	36,781,168	23,114,838	
1871	27,765,366	69,031,468		41,266,102
1872	27,379,173	37,587,522		10,208,349
1873	33,889,642	54,856,969		20,967,327
1874	99,789,685	16,558,435	83,231,250	
1875	117,346,702	26,574,749	90,771,953	
1876	115,473,251	18,268,415	97,204,836	
1877	103,196,521	19,099,473	84,097,048	
1878	70,324,568	24,698,596	45,625,972	
1879	37,443,737	69,774,711		32,330,974
1880	37,605,278	78,737,824		41,132,546
1881	45,059,710	43,054,440	2,005,270	
1882	54,703,341	37,068,545	17,634,796	
1883	12,462,010	26,028,752		13,566,742
1884	24,598,043	15,806,983	8,791,060	
1885	47,018,553	38,816,482	8,202,071	
1886	50,354,659	38,233,403	12,121,256	
1887	17,982,216	49,809,821		31,827,605
1888	19,514,968	37,135,702		17,620,734
1889	65,161,124	24,974,151	40,186,973	
1890	22,528,197	48,153,115		25,624,918
1891	69,462,638	45,430,120	24,032,518	
1892	74,379,010	20,837,982	53,541,028	
1893	58,890,873	22,556,169	36,334,704	
1894	88,538,554	20,767,201	67,771,353	
1895	48,872,298	47,165,473	1,706,825	
Total	6,173,750,981	4,521,495,632	2,030,534,308	378,278,959

a For the periods.

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Value of SILVER COIN and BULLION imported into and exported from France from 1815 to 1895.

Years.	Imports.	Exports.	Excess of imports over exports.	Excess of exports over imports.
1815–1821 *a*	$60,602,000	$74,691,000	.....	$14,089,000
1822–1824 *a*	79,323,000	9,264,000	$70,059,000	.....
1825–1829 *a*	186,824,000	84,534,000	102,290,000	.....
1830–1836 *a*	200,527,000	71,410,000	129,117,000	.....
1837–1852 *a*	515,696,000	202,071,000	313,625,000	.....
1853	21,725,817	44,284,622	.....	22,558,805
1854	19,270,664	50,863,606	.....	31,592,942
1855	23,331,963	61,383,843	.....	38,051,880
1856	21,209,928	75,949,167	.....	54,739,239
1857	18,965,917	88,411,177	.....	69,445,260
1858	31,002,555	33,885,975	.....	2,883,420
1859	40,633,641	73,737,580	.....	33,103,939
1860	25,206,765	55,554,664	.....	30,347,899
1861	33,230,740	45,160,649	.....	11,929,909
1862	25,368,885	41,999,888	.....	16,631,003
1863	31,073,000	44,262,813	.....	13,189,813
1864	51,672,276	59,869,758	.....	8,197,482
1865	45,574,441	31,565,343	14,009,098	.....
1866	48,260,036	39,581,791	8,678,245	.....
1867	49,095,533	12,493,276	36,602,257	.....
1868	37,260,001	16,169,926	21,090,075	.....
1869	37,213,102	15,708,077	21,505,025	.....
1870	20,465,720	13,620,589	6,845,131	.....
1871	30,337,863	27,343,082	2,994,781	.....
1872	46,488,682	26,754,432	19,734,250	.....
1873	75,083,562	40,054,448	35,029,114	.....
1874	83,842,095	14,181,833	69,660,262	.....
1875	51,488,926	15,717,920	35,771,006	.....
1876	39,601,863	12,501,575	27,100,288	.....
1877	28,594,108	8,143,828	20,450,280	.....
1878	34,555,492	11,620,530	22,934,962	.....
1879	26,602,927	11,999,968	14,602,959	.....
1880	19,487,017	12,000,933	7,486,084	.....
1881	25,112,195	15,251,246	9,860,949	.....
1882	24,713,071	30,348,092	.....	5,635,021
1883	15,717,920	18,517,192	.....	2,799,272
1884	19,500,720	8,938,602	10,562,118	.....
1885	45,505,290	26,581,143	18,924,147	.....
1886	35,518,423	25,923,836	9,594,587	.....
1887	34,354,592	26,738,827	7,615,765	.....
1888	31,669,988	21,021,915	10,648,073	.....
1889	21,350,913	19,818,847	1,532,066	.....
1890	26,614,436	20,822,832	5,791,604	.....
1891	34,030,365	28,055,497	5,974,868	.....
1892	24,020,020	20,739,863	3,280,157	.....
1893	31,689,656	24,561,540	7,128,116	.....
1894	18,326,887	21,201,693	.....	2,874,806
1895	27,227,348	17,163,361	10,063,987	.....
Total	2,474,967,343	1,752,475,779	1,080,561,254	358,069,690

a For the periods.

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BELGIUM.

Value of GOLD COIN and BULLION imported to and exported from Belgium from 1852 to 1894.

Years.	Imports.	Exports.	Excess of imports over exports.	Excess of exports over imports.
1852–1855*a*	*b* $32,295,892	*b* $44,691,920		$12,396,028
1856–1860*a*	*b* 61,901,100	*b* 182,089,520		120,188,420
1861–1865*a*	*b* 36,100,885	*b* 129,583,765		93,482,880
1866–1870*a*	*b* 72,521,380	*b* 23,035,185	$49,486,195	
1871–1875*a*	*b* 192,250,550	*b* 17,445,265	174,805,285	
1876–1880*a*	8,022,250	896,295	7,125,955	
1881	250,740	11,966	238,774	
1882	3,169,602	3,689,539		519,937
1883	476,808	3,227,608		2,750,800
1884	1,302,424	4,037,622		2,735,198
1885	2,950,557	779,767	2,170,790	
1886	2,095,316	522,993	1,572,323	
1887	764,845	34,741	730,104	
1888	1,157,699	66,477	1,091,222	
1889	13,550,148	466,673	13,083,475	
1890	9,202,507	195,444	9,007,063	
1891	356,479	2,517	353,962	
1892	512,378	10,534	501,844	
1893	546,675	32,450	514,225	
1894	3,904,676	325,100	3,579,576	
Total	443,332,911	411,145,381	264,260,793	232,073,263

a For the periods. *b* Gold and silver.

Value of SILVER COIN and BULLION imported into and exported from Belgium from 1852 to 1894.

Years.	Imports.	Exports.	Excess of imports over exports.	Excess of exports over imports.
1852–1855				
1856–1860				
1861–1865				
1866–1870				
1871–1875				
1876–1880*a*	$30,651,950	$3,763,675	$26,888,275	
1881	4,426,007	3,385,085	1,040,922	
1882	5,897,347	433,119	5,464,228	
1883	16,850,216	3,516,753	13,333,463	
1884	7,116,601	1,890,570	5,226,031	
1885	579,886	62,731	517,155	
1886	2,595,119	168,891	2,426,228	
1887	267,046	175,512	91,534	
1888	1,757,497	760,231	997,266	
1889	10,391,231	1,510,060	8,881,171	
1890	10,595,251	1,179,518	9,415,733	
1891	297,911	13,823	284,088	
1892	333,179	25,379	307,800	
1893	362,453	50,419	312,034	
1894	1,004,219	3,864,205		$2,859,986
Total	93,125,913	20,799,971	75,185,928	2,859,986

a For the period.

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SWITZERLAND.

Value of GOLD COIN and BULLION imported into and exported from Switzerland from 1878 to 1895.

Years.	Imports.	Exports.	Excess of imports over exports.	Excess of exports over imports.
1878	$1,861,375	$1,794,898	$66,477	
1879	2,991,496	864,210	2,127,286	
1880	2,858,541	1,528,987	1,329,554	
1881	2,127,286	664,778	1,462,508	
1882	2,792,063	531,822	2,260,241	
1883	4,985,827	1,263,076	3,722,751	
1884	2,526,152	132,955	2,393,197	
1885*a*	5,553,786	6,199,670		$645,884
1886	2,523,493	1,931,777	591,716	
1887	2,949,615	2,234,979	714,636	
1888	2,877,819	1,879,324	998,495	
1889	6,594,579	1,067,906	5,526,673	
1890	6,118,551	1,226,808	4,891,743	
1891	2,553,554	1,124,854	1,428,700	
1892	4,548,749	1,485,931	3,062,818	
1893	4,802,720	2,120,080	2,682,640	
1894	9,275,749	4,059,069	5,216,680	
1895	7,742,375	4,030,768	3,711,607	
Total	75,683,730	34,141,892	42,187,722	645,884

a Gold and silver.

Value of SILVER COIN and BULLION imported into and exported from Switzerland from 1878 to 1895.

Years.	Imports.	Exports.	Excess of imports over exports.	Excess of exports over imports.
1878	$2,985,037	$1,136,544	$1,848,493	
1879	3,040,792	192,998	2,847,794	
1880	5,240,970	471,773	4,769,197	
1881	4,880,707	450,329	4,430,378	
1882	4,696,286	1,518,251	3,178,035	
1883	3,898,561	1,037,901	2,860,660	
1884	2,993,615	802,014	2,191,601	
1885				
1886	5,342,358	3,427,045	1,915,313	
1887	6,187,818	3,589,979	2,597,839	
1888	6,500,132	3,528,862	2,971,270	
1889	8,877,855	2,844,575	6,033,280	
1890	8,522,390	3,843,796	4,678,594	
1891	10,570,093	6,030,421	4,539,672	
1892	7,340,632	5,398,789	1,941,843	
1893	8,076,938	8,760,037		$683,099
1894	6,312,702	6,771,227		458,525
1895	10,835,343	5,025,086	5,810,257	
Total	106,302,229	54,820,627	52,614,226	1,141,624

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ITALY.

Value of GOLD COIN and BULLION imported into and exported from Italy from 1862 to 1895.

Years.	Imports.	Exports.	Excess of imports over exports.	Excess of exports over imports.
1862 *a*	$29,857	$202,065	.....	$172,208
1863 *a*	40,452	77,666	.....	37,214
1864 *a*	29,805	36,624	.....	6,819
1865 *a*	6,652	143,484	.....	136,832
1866 *a*	263,285	905,363	.....	642,078
1867 *a*	286,002	1,496,472	.....	1,210,470
1868 *a*	281,329	284,426	.....	3,097
1869 *a*	291,951	30,309	$261,642	.....
1870 *a*	260,668	188,088	72,580	.....
1871 *a*	432,786	2,097,918	.....	1,665,132
1872 *a*	791,629	953,115	.....	161,486
1873 *a*	4,918,051	340,794	4,577,257	.....
1874 *a*	1,804,050	1,403,096	400,954	.....
1875 *a*	1,619,190	2,198,594	.....	579,404
1876 *a*	3,887,505	1,612,785	2,274,720	.....
1877 *a*	2,841,419	3,709,674	.....	868,255
1878	1,517,775	3,945,680	.....	2,427,905
1879	1,824,846	6,411,120	.....	4,586,274
1880	2,979,063	3,063,200	.....	84,137
1881	14,351,731	3,957,098	10,394,633	.....
1882	12,344,261	222,934	12,121,327	.....
1883	8,120,475	1,616,124	6,504,351	.....
1884	3,942,758	2,271,243	1,671,515	.....
1885	2,257,849	19,558,195	.....	17,300,346
1886	2,063,595	1,798,760	264,835	.....
1887	1,500,479	4,705,456	.....	3,204,977
1888	1,432,639	4,372,936	.....	2,940,297
1889	3,086,186	3,515,090	.....	428,904
1890	1,913,325	3,817,212	.....	1,903,887
1891	2,316,000	3,184,500	.....	868,500
1892	4,173,109	6,710,037	.....	2,536,928
1893	2,899,208	14,954,167	.....	12,054,959
1894	3,579,320	4,578,867	.....	999,547
1895	1,030,427	3,262,472	.....	2,232,045
Total	89,117,677	107,625,564	38,543,814	57,051,701

a Gold and silver.

Value of SILVER COIN and BULLION imported into and exported from Italy from 1878 to 1895.

Years.	Imports.	Exports.	Excess of imports over exports.	Excess of exports over imports.
1878	$737,937	$5,067,962	.....	$4,330,025
1879	997,378	375,020	$622,358	.....
1880	4,638,937	2,498,174	2,140,763	.....
1881	3,654,990	1,442,156	2,212,834	.....
1882	10,703,056	985,155	9,717,901	.....
1883	10,037,549	1,919,564	8,117,985	.....
1884	1,091,724	3,713,730	.....	2,622,006
1885	20,414,016	16,822,841	3,591,175	.....
1886	8,809,527	8,845,808	.....	36,281
1887	15,676,915	16,622,411	.....	945,496
1888	11,504,228	10,194,453	1,309,775	.....
1889	6,489,[illegible]	7,111,124	.....	622,039
1890	9,212,739	9,047,222	165,517	.....
1891	8,163,900	8,916,600	.....	752,700
1892	10,653,251	12,233,135	.....	1,579,884
1893	8,920,296	6,901,927	2,018,369	.....
1894	17,358,980	4,433,107	12,925,873	.....
1895	432,127	1,655,940	.....	1,223,813
Total	149,496,635	118,786,329	42,822,550	12,112,244

NOTE.—From 1862 to 1878 silver was included with gold in the reports.

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PORTUGAL.

Value of GOLD COIN and BULLION imported into and exported from Portugal from 1869 to 1895.

Years.	Imports.	Exports.	Excess of imports over exports.	Excess of exports over imports.
1869	$325,712	$136,358	$189,354	.....
1870	1,232,768	74,264	1,158,504	.....
1871	3,878,716	48,197	3,830,519	.....
1872	1,938,875	2,829	1,936,046	.....
1873	4,221,064	35,527	4,185,537	.....
1874	1,565,302	42,963	1,522,339	.....
1875	2,693,037	71,771	2,621,266	.....
1876	4,671,243	1,786,325	2,884,918	.....
1877	779,127	1,520,681	.....	$741,554
1878	3,513,650	1,823,424	1,690,226	.....
1879 *a*	1,343,520	2,838,240	.....	1,494,720
1880	2,779,705	30,489	2,749,216	.....
1881 *a*	3,248,640	135,000	3,113,640	.....
1882	2,956,220	2,795,667	160,553	.....
1883	21,044,080	2,425,351	18,618,729	.....
1884	2,932,122	295,764	2,636,358	.....
1885 *a*	4,177,000	847,000	3,330,000	.....
1886	9,448,364	3,737	9,444,627	.....
1887	4,762,970	3,123	4,759,847	.....
1888	4,866,877	572,297	4,294,580	.....
1889	10,844	2,037	8,807	.....
1890	15,878,704	11,284,488	4,594,216	.....
1891	4,018,788	462,988	3,555,800	.....
1892	1,596,114	9,805,793	.....	8,209,679
1893	1,010,664	6,237,108	.....	5,226,444
1894	3,830	3,891	.....	61
1895	979,274	2,267,537	.....	1,288,263
Total	105,877,210	45,552,849	77,285,082	16,960,721

a Gold and silver.

Value of SILVER COIN and BULLION imported into and exported from Portugal from 1869 to 1895.

Years.	Imports.	Exports.	Excess of imports over exports.	Excess of exports over imports.
1869	$7,747	$371,232	.....	$363,485
1870	2,984	244,858	.....	241,874
1871	33,026	129,078	.....	96,052
1872	346	41,891	.....	41,545
1873	24,632	39,701	.....	15,069
1874	62,387	76,842	.....	14,455
1875	47,537	54,607	.....	7,070
1876	173,774	30,467	$143,307	.....
1877	63,818	111,718	.....	47,900
1878	362,572	216,391	146,181	.....
1879	.....	.....	.....	.....
1880	47,181	33,035	14,146	.....
1881	.....	.....	.....	.....
1882	66,006	16,417	49,589	.....
1883	500,713	107,888	392,825	.....
1884	79,669	23,869	55,800	.....
1885	.....	.....	.....	.....
1886	637,189	3,886	633,303	.....
1887	338,959	2,118	336,841	.....
1888	99,936	102,948	.....	3,012
1889	487	109	378	.....
1890	495,720	204,984	290,736	.....
1891	4,911,840	5,338,440	.....	426,600
1892	2,465,264	271,793	2,193,471	.....
1893	.....	166,536	.....	166,536
1894	298	302	.....	4
1895	255,199	218,933	36,266	.....
Total	10,677,284	7,808,043	4,292,843	1,423,602

NOTE.—1879–1881 and 1885 silver was included with gold in the reports.

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AUSTRIA-HUNGARY.

Value of GOLD COIN and BULLION imported into and exported from Austria-Hungary from 1859 to 1895.

Years.	Imports.	Exports.	Excess of imports over exports.	Excess of exports over imports.
1859	$13,358,460	$9,768,955	$3,589,505	.....
1860	6,933,771	8,345,382	.....	$1,411,611
1861	6,646,000	6,124,289	521,711	.....
1862	7,500,011	8,090,176	.....	590,165
1863	10,498,022	8,199,170	2,298,852	.....
1864	5,677,013	5,940,195	.....	263,182
1865	4,252,111	4,644,889	.....	392,778
1866	6,284,458	5,027,699	1,256,759	.....
1867	8,491,594	4,383,702	4,107,892	.....
1868	7,672,142	2,662,388	5,009,754	.....
1869	13,313,267	3,946,395	9,366,872	.....
1870	16,115,885	7,217,556	8,898,329	.....
1871	26,986,083	9,710,471	17,275,612	.....
1872	15,656,646	5,930,225	9,726,421	.....
1873	12,380,169	2,108,111	10,272,058	.....
1874	4,699,387	296,412	4,402,975	.....
1875	1,908,452	1,609,661	388,791	.....
1876	10,285,350	2,845,817	7,439,533	.....
1877	8,671,036	2,758,755	5,912,281	.....
1878	6,760,976	1,860,880	4,900,096	.....
1879	10,454,823	1,452,816	9,002,007	.....
1880	10,562,488	1,516,617	9,045,871	.....
1881	9,412,065	998,220	8,413,845	.....
1882	8,411,178	1,995,129	6,416,049	.....
1883	6,420,701	968,322	5,452,379	.....
1884	4,745,244	1,384,362	3,360,882	.....
1885	3,833,413	1,935,980	1,897,433	.....
1886	3,156,850	451,263	2,705,587	.....
1887	3,329,646	1,497,344	1,832,302	.....
1888	10,559,829	4,533,237	6,026,592	.....
1889	9,958,366	3,468,547	6,489,819	.....
1890	18,973,001	1,733,941	17,239,060	.....
1891	17,149,500	4,072,418	13,077,082	.....
1892	30,107,622	1,153,446	28,954,176	.....
1893	68,933,160	6,291,269	62,641,891	.....
1894	22,292,000	18,951,806	3,340,194	.....
1895	27,645,892	11,617,791	16,028,101	.....
Total	460,126,611	165,493,636	297,290,711	2,657,736

GERMANY.

Value of GOLD COIN and BULLION imported into and exported from Germany from 1872 to 1895.

Years.	Imports.	Exports.	Excess of imports over exports.	Excess of exports over imports.
1872	$8,396,640	$24,247,440	.....	$15,850,800
1873	84,252,000	12,598,530	$71,653,470	.....
1874	4,176,900	8,353,800	.....	4,176,900
1875	3,665,200	6,664,000	.....	2,998,800
1876	20,991,600	5,331,200	15,660,400	.....
1877	17,374,000	11,067,000	6,307,000	.....
1878	40,126,800	333,200	39,793,600	.....
1879	20,658,400	1,332,800	19,325,600	.....
1880	4,962,300	7,064,554	.....	2,102,254
1881	3,350,564	10,863,510	.....	7,512,946
1882	6,816,558	9,335,788	.....	2,519,230
1883	4,963,252	10,027,416	.....	5,064,164
1884	4,384,912	7,873,754	.....	3,488,842
1885	10,127,138	5,837,664	4,289,474	.....
1886	11,152,204	5,522,790	5,629,414	.....
1887	13,193,054	3,993,878	9,199,176	.....
1888	31,943,646	23,868,544	8,075,102	.....
1889	17,375,404	13,678,146	3,697,258	.....
1890	26,471,145	10,816,886	15,654,259	.....
1891	56,647,846	31,689,457	24,958,389	.....
1892	45,612,162	38,897,709	6,714,453	.....
1893	35,551,259	24,175,031	11,376,228	.....
1894 *a*	74,130,690	12,689,947	61,440,743	.....
1895	23,193,328	19,574,609	3,618,719	.....
Total	569,517,002	305,837,653	307,393,285	43,713,936

a In addition there were imported 66,269 kilograms, and exported 27 kilograms, of gold and silver value not stated.

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Value of SILVER COIN and BULLION imported into and exported from Austria-Hungary from 1859 to 1895.

Years.	Imports.	Exports.	Excess of imports over exports.	Excess of exports over imports.
1859	$17,324,743	$22,440,114	.....	$5,115,371
1860	9,300,505	16,127,316	.....	6,826,811
1861	7,386,002	7,573,146	.....	187,144
1862	4,576,629	6,358,763	.....	1,782,134
1863	5,128,338	3,697,136	$1,431,202	.....
1864	3,229,170	6,193,978	.....	2,964,808
1865	6,416,116	3,637,996	2,778,120	.....
1866	7,067,029	18,568,343	.....	11,501,314
1867	4,544,544	5,856,469	.....	1,311,925
1868	8,599,096	5,659,682	2,939,414	.....
1869	6,814,801	2,782,691	4,032,110	.....
1870	4,621,514	6,210,934	.....	1,589,420
1871	4,225,114	11,361,133	.....	7,136,019
1872	3,148,004	20,579,681	.....	17,431,677
1873	8,224,807	10,153,939	.....	1,929,132
1874	5,130,042	7,379,934	.....	2,249,892
1875	4,950,710	5,693,304	.....	742,594
1876	6,922,317	12,946,813	.....	6,024,496
1877	5,619,826	4,780,771	839,055	.....
1878	18,478,532	5,524,363	12,954,169	.....
1879	20,774,473	2,687,560	18,086,913	.....
1880	3,615,928	8,231,457	.....	4,615,529
1881	7,905,793	651,495	7,254,298	.....
1882	1,562,781	23,157,024	.....	21,594,243
1883	3,186,613	96,627	3,089,986	.....
1884	882,859	2,737,890	.....	1,855,031
1885	1,611,073	1,870,907	.....	259,834
1886	1,354,690	12,842	1,341,848	.....
1887	1,348,456	467,924	880,532	.....
1888	1,524,255	404,379	1,119,876	.....
1889	2,040,721	55,940	1,984,781	.....
1890	1,329,588	44,511	1,285,077	.....
1891	1,852,808	974,604	878,204	.....
1892	3,699,472	1,738,086	1,961,386	.....
1893	3,699,668	1,865,102	1,834,566	.....
1894	4,729,927	3,073,648	1,656,279	.....
1895	1,395,736	1,097,257	298,479	.....
Total	204,222,680	232,693,759	66,646,295	95,117,374

NOTE.—The above is at United States silver-dollar coining rate.

Value of SILVER COIN and BULLION imported into and exported from Germany from 1872 to 1895.

Years.	Imports.	Exports.	Excess of imports over exports.	Excess of exports over imports.
1872	$40,698,000	$17,157,420	$23,540,580	.....
1873	35,057,400	31,915,800	3,141,600	.....
1874	12,052,320	17,080,308	.....	$5,027,988
1875	7,216,160	9,253,440	.....	2,037,280
1876	5,483,520	8,409,492	.....	2,925,972
1877	7,106,680	4,678,128	2,428,552	.....
1878	9,520,000	6,645,912	2,874,088	.....
1879	7,794,500	9,567,600	.....	1,773,100
1880	4,366,348	5,017,992	.....	651,644
1881	3,142,790	4,165,714	.....	1,022,924
1882	1,551,284	3,418,156	.....	1,866,872
1883	1,502,018	4,917,556	.....	3,415,538
1884	1,356,838	7,468,202	.....	6,111,364
1885	710,906	4,618,866	.....	3,907,960
1886	2,310,980	10,141,894	.....	7,830,914
1887	2,060,842	9,063,278	.....	7,002,436
1888	2,603,958	11,056,290	.....	8,452,332
1889	2,254,669	13,934,329	.....	11,679,660
1890	3,141,743	13,442,240	.....	10,300,497
1891	4,056,672	13,166,707	.....	9,110,035
1892	3,904,687	3,029,225	875,462	.....
1893	2,464,328	11,894,183	.....	9,429,855
1894	4,251,407	8,450,850	.....	4,199,443
1895	2,389,088	5,547,817	.....	3,158,729
Total	166,997,138	234,041,399	32,860,282	99,904,543

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NETHERLANDS.

Value of GOLD COIN and BULLION imported into and exported from the Netherlands from 1851 to 1895.

Years.	Imports.	Exports.	Excess of imports over exports.	Excess of exports over imports.
1851–1855 *a*	*b* $22, 655, 250	*b* $20, 375, 265	$2, 279, 985	.....
1856–1860 *a*	*b* 34, 469, 490	26, 990, 020	7, 479, 470	.....
1861–1865 *a*	*b* 26, 803, 655	*b* 36, 969, 725	.....	$10, 166, 070
1866–1870 *a*	*b* 42, 527, 210	*b* 26, 139. 410	16, 387, 800	.....
1871–1875 *a*	*b* 50, 747, 505	*b* 18, 602, 135	32, 145, 370	.....
1876–1880 *a*	22, 539, 255	4, 538, 920	18, 000, 335	.....
1881	2, 668, 641	3, 183, 004	.....	514, 363
1882	4, 014, 018	1, 852, 411	2, 161, 607	.....
1883	11, 393, 703	308, 645	11, 085, 058	.....
1884	5, 658, 021	805, 809	4, 852, 212	.....
1885	6, 595, 534	421, 963	6, 173, 571	.....
1886	11, 212, 074	770, 212	10, 441, 862	.....
1887	1, 248, 992	603	1, 248, 389	.....
1888	3, 766, 457	5, 553, 435	.....	1, 786, 978
1889	988, 855	822, 894	165, 961	.....
1890	2, 623, 952	228, 158	2, 395, 794	.....
1891	3, 707, 284	891, 636	2, 815, 648	.....
1892	852, 155	97, 464	754, 691	.....
1893	7, 044, 546	943, 333	6, 101, 213	.....
1894	3, 258, 790	263, 713	2, 995, 077	.....
1895	1, 385, 000	305, 124	1, 079, 876	.....
Total	266, 160, 387	150, 063, 879	128, 563, 919	12, 467, 411

a For the periods. *b* Gold and silver.

Value of SILVER COIN and BULLION imported into and exported from the Netherlands from 1851 to 1895.

Years.	Imports.	Exports.	Excess of imports over exports.	Excess of exports over imports.
1851–1855	.....	.....	.....	.....
1856–1860	.....	.....	.....	.....
1861–1865	.....	.....	.....	.....
1866–1870	.....	.....	.....	.....
1871–1875	.....	.....	.....	.....
1876–1880 *a*	$13, 273, 625	$8, 520, 980	$4, 752, 645	.....
1881	976, 851	19, 507	957, 344	.....
1882	1, 061, 238	26, 745	1, 034, 493	.....
1883	926, 065	111, 256	814, 809	.....
1884	706, 709	425, 125	281, 584	.....
1885	950, 119	286, 444	663, 675	.....
1886	572, 811	11, 619	561, 192	.....
1887	309, 492	47, 430	262, 062	.....
1888	387, 338	1, 631, 316	.....	$1, 243, 978
1889	264, 797	6, 668. 657	.....	6, 403, 860
1890	551, 823	3, 083, 943	.....	2, 532, 120
1891	4, 802, 292	625, 512	4, 176, 780	.....
1892	5, 255, 793	2, 241, 753	3, 014, 040	.....
1893	951, 392	318, 143	633, 249	.....
1894	2, 466, 758	630, 403	1, 836, 355	.....
1895	1, 128, 354	22, 310	1, 106, 044	.....
Total	34, 585. 457	24, 671, 143	20, 094, 272	10, 179, 958

a For the period.

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SPAIN.

Value of GOLD and SILVER COIN and BULLION imported into and exported from Spain from 1871 to 1895.

Years.	Imports.	Exports.	Excess of imports over exports.	Excess of exports over imports.
1871	$20,765,642	$1,648,799	$19,116,843	
1872	20,538,288	482,886	20,055,402	
1873	20,342,972	1,229,796	19,113,176	
1874	12,228,866	1,245,236	10,983,630	
1875	17,800,197	832,988	16,967,209	
1876	2,318,123	820,636	1,497,487	
1877	9,505,250	402,019	9,103,231	
1878	7,504,226	441,198	7,063,028	
1879	6,577,247	590,773	5,986,474	
1880	17,241,848	2,458,048	14,783,800	
1881	2,021,289	1,252,570	768,719	
1882	7,896,981	1,370,879	6,526,102	
1883	9,502,355	1,399,057	8,103,298	
1884	8,718,196	458,375	8,259,821	
1885	5,243,810	1,888,119	3,355,691	
1886	12,131,787	509,327	11,622,460	
1887	3,861,158	886,642	2,974,516	
1888	546,383	820,250		$273,867
1889	2,611,869	2,555,706	56,163	
1890	8,359,988	1,027,918	7,332,070	
1891	22,661,095	4,028,875	18,632,220	
1892	8,948,997	8,380,253	568,744	
1893	5,026,068	2,528,135	2,497,933	
1894	4,866,595	690,223	4,176,372	
1895	4,680,687	8,142,978		3,462,291
Total	241,899,917	46,091,686	199,544,389	3,736,158

SCANDINAVIAN UNION.

Value of GOLD and SILVER COIN and BULLION imported into and exported from Norway, Sweden, and Denmark from 1871 to 1895.

Years.	Imports.	Exports.	Excess of imports over exports.	Excess of exports over imports.
1871 *a*	$2,896,008	$558,780	$2,337,228	
1872 *a*	3,461,220	30,284	3,430,936	
1873 *a*	7,014,364	4,843,832	2,170,532	
1874 *a*	3,424,772	2,234,584	1,190,188	
1875	5,966,484	3,348,928	2,617,556	
1876	10,659,432	10,956,644		$297,212
1877	6,223,496	4,402,007	1,821,489	
1878	6,982,472	3,091,916	3,890,556	
1879	9,207,944	5,361,876	3,846,068	
1880	7,203,572	2,399,940	4,803,632	
1881	4,036,884	3,252,448	784,436	
1882	3,152,484	2,179,108	973,376	
1883	4,043,852	1,836,068	2,207,784	
1884	2,927,096	1,079,236	1,847,860	
1885	2,379,481	1,813,154	566,327	
1886	2,519,987	322,813	2,197,174	
1887 *b*	4,959,684	2,387,880	2,571,804	
1888 *b*	1,656,650	705,486	951,164	
1889	2,911,368	1,353,802	1,557,566	
1890	1,374,770	746,136	628,634	
1891	1,966,988	933,893	1,033,095	
1892	1,672,238	389,821	1,282,417	
1893	657,388	953,819		296,431
1894	3,073,305	781,238	2,292,067	
1895	3,329,967	654,459	2,675,508	
Total	103,701,906	56,618,152	47,677,397	593,643

a Exclusive of imports and exports of Denmark.
b Exclusive of imports and exports of Norway.

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RUSSIA.

Value of GOLD COIN and BULLION imported into and exported from Russia from 1871 to 1895.

Years.	Imports.	Exports.	Excess of imports over exports.	Excess of exports over imports.
1871	$4,897,071	$13,013,320	.....	$8,116,249
1872	6,260,070	4,992,774	$1,267,296	.....
1873	1,929,500	11,043,686	.....	9,114,186
1874	5,056,834	13,162,277	.....	8,105,443
1875	1,328,268	21,283,157	.....	19,954,889
1876	1,148,438	78,603,971	.....	77,455,533
1877	7,257,235	10,490,306	.....	3,233,071
1878	7,910,178	5,252,871	2,657,307	.....
1879	5,702,058	4,493,420	1,208,638	.....
1880	5,438,103	19,971,097	.....	14,532,994
1881	4,145,338	51,652,715	.....	47,507,377
1882	3,464,610	52,957,057	.....	49,492,447
1883	2,326,205	14,827,822	.....	12,501,617
1884	1,861,582	3,884,469	.....	2,022,887
1885	1,921,010	4,118,325	.....	2,197,315
1886	1,853,092	11,031,337	.....	9,178,245
1887	1,691,014	14,579,302	.....	12,888,288
1888	16,213,203	27,013,772	.....	10,800,569
1889	2,074,598	13,468,682	.....	11,394,084
1890	12,195,212	13,054,997	.....	859,785
1891	55,818,120	475,429	55,342,691	.....
1892	89,497,054	195,956	89,301,098	.....
1893	10,225,426	134,454	10,090,972	.....
1894	84,527,216	29,085,329	55,441,887	.....
1895	19,486,233	185,070	19,301,163	.....
Total	354,227,668	418,971,595	234,611,052	299,354,979

Value of SILVER COIN and BULLION imported into and exported from Russia from 1871 to 1895.

Years.	Imports.	Exports.	Excess of imports over exports.	Excess of exports over imports.
1871	$830,457	$628,245	$202,212	.....
1872	3,803,430	969,381	2,834,049	.....
1873	13,932,534	273,989	13,658,545	.....
1874	7,778,200	341,136	7,437,064	.....
1875	3,642,896	354,256	3,288,640	.....
1876	3,038,577	1,087,466	1,951,111	.....
1877	1,193,975	4,367,616	.....	$3,173,641
1878	4,842,273	5,672,730	.....	830,457
1879	5,697,428	3,369,679	2,327,749	.....
1880	4,124,499	2,240,535	1,883,964	.....
1881	3,530,985	1,592,223	1,938,762	.....
1882	4,078,963	9,110,327	.....	5,031,364
1883	2,732,944	2,115,504	617,440	.....
1884	2,654,220	1,779,771	874,449	.....
1885	3,323,371	2,479,793	843,578	.....
1886	3,669,137	1,880,877	1,788,260	.....
1887	3,143,541	2,235,133	908,408	.....
1888	1,471,051	3,127,334	.....	1,656,283
1889	6,541,777	2,333,151	4,208,626	.....
1890	5,693,569	3,101,864	2,591,705	.....
1891	8,145,577	4,131,445	4,014,132	.....
1892	9,019,503	4,157,443	4,862,060	.....
1893	17,570,074	6,190,134	11,379,940	.....
1894	19,076,853	5,844,742	13,232,111	.....
1895	21,536,271	1,762,512	19,773,759	.....
Total	161,072,105	71,147,286	100,616,564	10,691,745

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JAPAN.

Value of GOLD COIN and BULLION imported into and exported from Japan from 1872 to 1895.

Years.	Imports.	Exports.	Excess of imports over exports.	Excess of exports over imports.
1872	.....	$2,684,786	.....	$2,684,786
1873	$2,013,907	2,614,055	.....	600,148
1874	2,700	8,126,290	.....	8,123,590
1875	26,515	10,603,345	.....	10,576,830
1876	621,464	5,872,356	.....	5,250,892
1877	162,280	6,221,776	.....	6,059,496
1878	242	4,601,082	.....	4,600,840
1879	701,666	4,749,634	.....	4,047,968
1880	20,618	5,888,174	.....	5,867,556
1881	150	2,246,889	.....	2,246,739
1882	160	2,291,773	.....	2,291,613
1883	558	1,009,570	.....	1,009,012
1884	400,542	1,426,543	.....	1,026,001
1885	724,989	484,918	$240,071	.....
1886	1,151,897	314,191	837,706	.....
1887	62,717	86,236	.....	23,519
1888	.....	441,237	.....	441,237
1889	646,326	264,385	381,941	.....
1890	327,436	1,682,608	.....	1,355,172
1891	250,000	193,000	57,000	.....
1892	329,214	6,479,022	.....	6,149,808
1893	315,424	1,462,200	.....	1,146,776
1894	555,966	3,547,138	.....	2,991,172
1895	1,029,912	2,791,952	.....	1,762,040
Total	9,344,683	76,083,160	1,516,718	68,255,195

Value of SILVER COIN and BULLION imported into and exported from Japan from 1872 to 1895.

Years.	Imports.	Exports.	Excess of imports over exports.	Excess of exports over imports.
1872	$3,691,509	$1,796,109	$1,895,400	.....
1873	1,066,635	2,508,862	.....	$1,442,227
1874	1,069,041	5,688,911	.....	4,619,870
1875	271,806	4,060,626	.....	3,788,820
1876	7,545,776	4,803,344	2,742,432	.....
1877	2,011,217	3,219,494	.....	1,208,277
1878	2,188,858	2,727,569	.....	538,711
1879	2,403,137	8,029,229	.....	5,626,092
1880	3,617,611	7,334,819	.....	3,717,208
1881	1,855,996	5,243,658	.....	3,387,662
1882	1,823,118	5,243,479	.....	3,420,361
1883	4,442,683	1,908,880	2,533,803	.....
1884	3,052,205	594,997	2,457,208	.....
1885	6,405,936	3,753,615	2,652,321	.....
1886	8,753,345	9,357,785	.....	604,440
1887	7,467,861	10,948,845	.....	3,480,984
1888	5,868,928	7,113,520	.....	1,244,592
1889	14,209,632	4,171,632	10,038,000	.....
1890	781,324	12,091,206	.....	11,309,882
1891	12,000,000	1,200,000	10,800,000	.....
1892	18,818,262	1,179,514	17,638,748	.....
1893	6,787,996	6,341,434	446,562	.....
1894	26,227,687	30,831,973	.....	4,604,286
1895	4,844,252	24,509,747	.....	19,665,495
Total	147,204,815	164,659,248	51,204,474	68,658,907

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CHINA.

Value of GOLD COIN and BULLION imported into and exported from China from 1881 to 1885.

Years.	Imports.	Exports.	Excess of imports over exports.	Excess of exports over imports.
1881	$32,812,230	$19,935,880	$12,876,350	.....
1882	32,197,337	21,424,176	10,773,161	.....
1883	34,653,579	29,756,403	4,897,176	.....
1884	7,349,653	21,132,426	.....	$13,782,773
1885	63,599,002	115,539,656	.....	51,940,654
Total	170,611,801	207,788,541	28,546,687	65,723,427

Value of SILVER COIN and BULLION imported into and exported from China from 1881 to 1885.

Years.	Imports.	Exports.	Excess of imports over exports.	Excess of exports over imports.
1881	$33,119,846	$24,725,684	$8,394,162	.....
1882	51,809,679	37,342,013	14,467,666	.....
1883	30,473,767	23,241,947	7,231,820	.....
1884	34,514,153	24,133,372	10,380,781	.....
1885	27,700,467	34,278,347	.....	$6,577,880
Total	177,617,912	143,721,363	40,474,429	6,577,880

NOTE.—The above is United States silver-dollar coining value.

MEXICO.

Value of GOLD and SILVER COIN and BULLION imported into and exported from Mexico from 1879 to 1895.

Years.	Imports.	Exports.	Excess of imports over exports.	Excess of exports over imports.
1879	.....	$21,835,872	.....	$21,835,872
1880	.....	22,388,576	.....	22,388,576
1881	.....	19,567,144	.....	19,567,144
1882	.....	17,337,024	.....	17,337,024
1883	.....	30,103,064	.....	30,103,064
1884	.....	34,008,568	.....	34,008,568
1885	.....	34,314,384	.....	34,314,384
1886	.....	30,384,496	.....	30,384,496
1887	.....	34,097,976	.....	34,097,976
1888	.....	31,502,096	.....	31,502,096
1889	.....	39,405,560	.....	39,405,560
1890	.....	41,847,008	.....	41,847,008
1891	.....	20,912,328	.....	20,912,328
1892	.....	49,250,763	.....	49,250,763
1893	.....	51,769,745	.....	51,769,745
1894	.....	47,320,215	.....	47,320,215
1895	.....	56,781,075	.....	56,781,075
Total	.....	582,825,894	.....	582,825,894

NOTE.—The above is United States silver-dollar coining value.

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ARGENTINA.

Value of GOLD and SILVER COIN and BULLION imported into and exported from Argentina from 1881 to 1895.

Years.	Imports.	Exports.	Excess of imports over exports.	Excess of exports over imports.
1881	$4,180,324	$3,007,497	$1,172,827	.....
1882	2,700,908	2,238,590	462,318	.....
1883	2,369,986	4,774,037	.....	$2,404,051
1884	4,778,903	4,389,583	389,320	.....
1885	6,136,657	8,219,519	.....	2,082,862
1886	20,084,046	8,136,788	11,947,258	.....
1887	9,489,675	9,611,338	.....	121,663
1888	43,613,573	8,501,776	35,111,797	.....
1889	11,436,275	27,670,919	.....	16,234,644
1890	7,088,401	775,529	6,312,872	.....
1891	9,007,891	1,659,476	7,348,415	.....
1892	6,510,898	1,974,477	4,536,421	.....
1893	4,524,885	1,910,700	2,614,185	.....
1894	3,186,952	264,067	2,922,885	.....
1895	6,559,353	.....	6,559,353	.....
Total	141,668,727	83,134,296	79,377,651	20,843,220

CHILE.

Value of GOLD and SILVER COIN and BULLION imported into and exported from Chile from 1873 to 1895.

Years.	Imports.	Exports.	Excess of imports over exports.	Excess of exports over imports.
1873	$1,547,547	$5,007,629	.....	$3,460,082
1874	126,525	4,326,319	.....	4,199,790
1875	345,522	6,535,710	.....	6,190,188
1876	330,922	5,061,160	.....	4,730,238
1877	321,189	1,771,406	.....	1,450,217
1878	180,060	1,854,137	.....	1,674,077
1879	53,531	2,501,381	.....	2,447,850
1880	43,799	4,676,707	.....	4,632,908
1881	116,796	2,949,099	.....	2,832,303
1882	29,199	3,990,530	.....	3,961,331
1883	345,521	6,647,639	.....	6,302,118
1884	58,398	6,214,521	.....	6,156,123
1885	155,728	7,620,939	.....	7,465,211
1886	311,456	7,509,010	.....	7,197,554
1887	87,597	9,105,222	.....	9,017,625
1888	199,527	8,895,962	.....	8,696,435
1889	452,585	6,117,190	.....	5,664,605
1890	199,527	5,645,140	.....	5,445,613
1891	116,796	5,353,150	.....	5,236,354
1892	162,336	5,713,680	.....	5,551,344
1893	.....	.....	.....	.....
1894	.....	.....	.....	.....
1895	11,217,505	6,437,865	$4,779,640	.....
Total	16,402,070	113,934,396	$4,779,640	102,311,966

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CAPE COLONY.

Value of GOLD COIN and BULLION imported into and exported from Cape Colony from 1825 to 1890.

Years.	Imports.	Exports.	Excess of imports over exports.	Excess of exports over imports.
1825–1865 *a*	$16,606,980	$5,196,147	$11,410,833	
1866	48,665	57,872		$9,207
1867	170,327	93,252	77,075	
1868	488,363	57,989	430,374	
1869	121,662	195,448		73,786
1870	968,433	140,505	827,928	
1871	3,220,333	252,143	2,968,190	
1872	8,848,416	303,830	8,544,586	
1873	1,511,389	485,087	1,026,302	
1874	810,608	1,211,680		401,072
1875	95,758	880,705		784,947
1876	1,303,682	659,747	643,935	
1877	1,376,129	127,721	1,248,408	
1878	2,123,575	372,029	1,751,546	
1879	2,825,811	1,274,774	1,551,037	
1880	1,798,171	716,436	1,081,735	
1881				
1882	1,290,737	249,233	1,041,504	
1883				
1884				
1885	979,914	1,893,818		913,904
1886	842,391	871,970		29,579
1887	3,339,378	228,580	3,110,798	
1888		2,516,569		2,516,569
1889		12,685,544		12,685,544
1890				
Total	48,770,722	30,471,079	35,714,251	17,414,608

a For the period.

Value of SILVER COIN and BULLION imported into and exported from Cape Colony from 1825 to 1890.

Years.	Imports.	Exports.	Excess of imports over exports.	Excess of exports over imports.
1825–1865 *a*	$1,367,389	$587,240	$780,149	
1866		9,387		$9,387
1867		9,991		9,991
1868	487	8,331		7,844
1869		6,395		6,395
1870		23,554		23,554
1871	52,072	12,531	39,541	
1872	837,524	49,940	787,584	
1873	164,716	18,186	146,530	
1874		30,182		30,182
1875	56,680	23,130	33,550	
1876	26,016	7,504	18,512	
1877	74,477	10,375	64,102	
1878	2,998	501	2,497	
1879	15,621	638	14,983	
1880	278,899	3,100	275,799	
1881				
1882	109,594	17,734	91,860	
1883				
1884				
1885	89,329	202,285		112,956
1886	2,433	127,176		124,743
1887	239,485	82,794	156,691	
1888				
1889				
1890				
Total	3,317,720	1,230,974	2,411,798	325,052

a For the period.

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L.—Coinages of the Principal Countries of the World, so far as Reported, from 1873 to 1895, inclusive.

AUSTRALASIA.

Calendar year.	Gold.		Silver.	
	Fine ounces.	Value.	Fine ounces.	Coining value.
1873	544,402	$11,253,781		
1874	799,947	16,536,367		
1875	944,022	19,514,665		
1876	879,753	18,186,111		
1877	733,795	15,168,881		
1878	822,311	16,998,684		
1879	977,687	20,210,574		
1880	1,071,571	22,151,334		
1881	952,945	19,699,115		
1882	904,707	18,701,959		
1883	962,843	19,903,722		
1884	1,073,737	22,196,106		
1885	1,049,488	21,694,857		
1886	1,089,627	22,524,595		
1887	1,166,914	24,122,267		
1888	1,181,087	24,415,230		
1889	1,418,622	29,325,529		
1890	1,243,363	25,702,600		
1891	1,276,570	26,389,044		
1892	1,489,189	30,784,262		
1893	1,550,871	32,059,354		
1894	1,702,976	35,203,648		
1895	1,629,996	33,695,008		
Total	25,466,423	526,437,693		

AUSTRIA-HUNGARY.

1873	120,312	$2,487,073	4,158,616	$5,376,797
1874	100,424	2,075,949	3,704,421	4,789,554
1875	92,456	1,911,237	5,340,848	6,905,339
1876	118,694	2,453,622	7,078,041	9,151,407
1877	180,239	3,725,861	6,215,416	8,036,093
1878	125,802	2,600,563	10,755,621	13,906,258
1879	119,988	2,480,372	24,857,273	32,138,697
1880	119,391	2,468,029	6,476,428	8,373,563
1881	117,551	2,429,998	6,983,113	9,028,671
1882	136,881	2,829,590	2,415,305	3,122,819
1883	104,219	2,154,390	4,294,273	5,552,191
1884	118,229	2,444,004	3,857,737	4,987,781
1885	135,061	2,791,958	3,207,955	4,147,659
1886	129,845	2,684,139	3,391,085	4,384,433
1887	129,149	2,669,750	4,297,524	5,556,395
1888	132,917	2,747,633	4,266,428	5,516,190
1889	159,395	3,294,987	3,502,325	4,528,259
1890	136,357	2,818,750	2,983,240	3,857,118
1891	139,589	2,885,561	2,595,961	3,356,394
1892	679,123	14,038,714	4,110,874	5,315,069
1893	2,702,601	55,867,730	14,284,357	18,468,664
1894	1,954,130	40,395,456	8,308,445	10,742,232
1895	880,847	18,208,728	7,004,395	9,056,188
Total	8,633,200	178,464,094	144,089,681	186,297,771

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COINAGES OF THE PRINCIPAL COUNTRIES OF THE WORLD, SO FAR AS REPORTED, FROM 1873 TO 1895, INCLUSIVE—Continued.

BELGIUM.

Calendar year.	Gold.		Silver.	
	Fine ounces.	Value.	Fine ounces.	Coining value.
1873			16,674,558	$21,559,025
1874	568,837	$11,758,911	1,791,281	2,316,000
1875	771,979	15,958,217	2,224,877	2,876,608
1876	386,462	7,988,883	1,612,067	2,084,289
1877	1,102,826	22,797,430		
1878	477,163	9,863,844		
1879				
1880			116,511	150,640
1881			32,763	42,360
1882	97,530	2,016,117		
1883				
1884				
1885				
1886			712,930	921,768
1887			451,403	583,632
1888				
1889				
1890				
1891				
1892				
1893				
1894				
1895				
Total	3,404,797	70,383,402	23,616,390	30,534,322

BRITISH INDIA.

1873	a7,485	a$154,730	a14,983,945	a$19,373,181
1874	a3,648	a75,421	a8,920,549	a11,533,639
1875	a3,304	a68,296	a18,431,546	a23,830,686
1876	a4,037	a83,460	a9,598,851	a12,410,636
1877			a23,604,087	a30,518,415
1878	a3,681	a76,093	a60,901,672	a78,741,556
1879	a20	a414	a31,364,425	a40,551,984
1880	a3,370	a69,670	a30,939,181	a40,002,173
1881	a3,144	a64,992	a15,996,718	a20,682,625
1882	8,250	170,543	22,728,483	29,386,322
1883	3,243	67,044	19,279,786	24,927,400
1884			13,421,872	17,353,531
1885	5,175	106,987	37,501,752	48,487,114
1886			20,976,719	27,121,414
1887	206	4,249	34,141,088	44,142,013
1888	5,235	108,216	28,073,563	36,297,132
1889	5,337	110,328	29,342,528	37,937,814
1890			44,806,258	57,931,323
1891	5,680	117,411	25,268,588	32,670,498
1892			40,418,875	52,258,748
1893			30,585,270	39,544,591
1894			1,770,015	2,288,504
1895			3,128,504	4,044,935
Total	61,815	1,277,854	566,184,275	732,036,234

a Fiscal year.

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COINAGES OF THE PRINCIPAL COUNTRIES OF THE WORLD, SO FAR AS REPORTED, FROM 1873 TO 1895, INCLUSIVE—Continued.

EGYPT.

Calendar year.	Gold.		Silver.	
	Fine ounces.	Value.	Fine ounces.	Coining value.
1873	7,700	$159,173	69,997	$90,501
1874	9,025	186,559	81,101	104,858
1875	15,220	314,622	122,543	158,440
1876	15,805	326,722	136,311	176,240
1877	1,140	23,568	180,329	233,152
1878	300	6,203	184,856	239,006
1879	103	2,136	246,992	319,343
1880	1,851	38,270	243,603	314,961
1881	2,166	44,771	70,070	90,595
1882	324	6,701	3	4
1883	1,877	38,804	.....	.....
1884	.....	.....	.....	.....
1885	.....	.....	.....	.....
1886	.....	.....	2,478,211	3,204,151
1887	11,917	246,354	1,670,385	2,159,690
1888	12,440	257,154	4,104,535	5,306,874
1889	.....	.....	.....	.....
1890	.....	.....	.....	.....
1891	.....	.....	249,409	322,468
1892	.....	.....	502,390	649,555
1893	30,129	622,818	415,424	537,114
1894	.....	.....	.....	.....
1895	.....	.....	.....	.....
Total	109,997	2,273,855	10,756,159	13,906,952

FRANCE.

1873	.....	.....	23,084,995	$29,847,266
1874	227,058	$4,693,702	8,955,811	11,579,230
1875	2,193,227	45,338,016	11,195,508	14,475,000
1876	1,647,806	34,063,180	7,860,936	10,163,634
1877	2,382,467	49,249,960	2,457,680	3,177,607
1878	1,730,199	35,766,393	271,889	351,534
1879	265,813	5,494,834	.....	.....
1880	.....	.....	.....	.....
1881	20,232	418,231	1,005,124	1,299,554
1882	34,937	722,206	173,136	223,853
1883	.....	.....	.....	.....
1884	.....	.....	17,913	23,160
1885	2,702	55,854	.....	.....
1886	215,546	4,455,733	23,044	29,795
1887	230,311	4,760,960	1,330,113	1,719,742
1888	5,174	106,949	860,356	1,112,379
1889	163,179	3,373,215	55	71
1890	192,355	3,976,340	.....	.....
1891	162,659	3,362,450	.....	.....
1892	42,145	871,225	.....	.....
1893	475,626	9,832,068	.....	.....
1894	91,786	1,897,395	597,094	772,000
1895	1,008,393	20,845,337	1,194,187	1,544,000
Total	11,091,615	229,284,048	59,027,841	76,318,825

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COINAGES OF THE PRINCIPAL COUNTRIES OF THE WORLD, SO FAR AS REPORTED, FROM 1873 TO 1895, INCLUSIVE—Continued.

GERMANY.

Calendar year.	Gold.		Silver.	
	Fine ounces.	Value.	Fine ounces.	Coining value.
1873	6,796,206	$140,490,041	432,638	$559,370
1874	1,076,574	22,254,756	8,528,638	11,026,926
1875	1,916,042	39,608,103	13,822,259	17,871,203
1876	1,835,494	37,943,031	25,468,144	32,928,509
1877	1,295,695	26,784,401	5,577,094	7,210,788
1878	1,438,811	29,742,879	1,208,467	1,562,463
1879	534,211	11,043,120	.....	.....
1880	322,282	6,662,153	.....	.....
1881	79,054	1,634,189	.....	.....
1882	153,208	3,167,085	4,955,535	6,407,157
1883	1,016,015	21,002,897	459,858	594,564
1884	663,874	13,723,494	88,419	114,319
1885	93,821	1,939,443	446,787	577,664
1886	411,488	8,506,210	892,518	1,153,963
1887	1,361,044	28,135,270	553,273	715,343
1888	1,661,232	34,340,722	765,028	989,127
1889	2,330,042	43,166,245	136,960	177,079
1890	1,153,043	23,835,512	.....	.....
1891	681,449	14,086,800	881,140	1,139,252
1892	428,790	8,863,874	957,410	1,237,864
1893	1,271,304	26,280,188	1,619,356	2,093,713
1894	1,810,829	37,433,154	825,989	1,067,945
1895	1,237,836	25,588,334	1,412,326	1,826,038
Total	29,568,344	611,231,901	69,031,839	89,253,287

GREAT BRITAIN.

1873	796,785	$16,471,000	4,071,349	$5,263,966
1874	344,077	7,112,706	3,352,174	4,334,124
1875	57,268	1,183,844	2,235,776	2,890,701
1876	1,105,671	22,856,238	836,926	1,082,086
1877	231,054	4,776,314	1,584,420	2,048,543
1878	501,967	10,376,571	2,312,658	2,990,104
1879	8,251	170,571	2,066,602	2,671,971
1880	976,993	20,196,228	2,866,265	3,705,878
1881	.....	.....	3,753,123	4,852,523
1882	.....	.....	789,974	1,021,381
1883	330,458	6,831,169	4,796,486	6,201,517
1884	547,112	11,309,819	2,478,731	3,204,824
1885	694,988	14,366,677	2,738,525	3,540,719
1886	.....	.....	1,571,002	2,031,194
1887	470,616	9,728,498	3,203,683	4,142,136
1888	478,592	9,893,375	2,847,709	3,681,886
1889	1,765,810	36,502,536	8,374,474	10,827,602
1890	1,808,039	37,375,479	6,444,461	8,332,232
1891	1,582,861	32,720,633	3,976,702	5,141,594
1892	3,274,141	67,682,503	2,931,849	3,790,673
1893	2,181,432	45,094,210	4,096,688	5,296,728
1894	1,336,785	27,633,807	3,095,805	4,002,657
1895	897,222	18,547,229	4,467,827	5,776,584
Total	19,390,122	400,829,407	74,893,209	96,831,623

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COINAGES OF THE PRINCIPAL COUNTRIES OF THE WORLD, SO FAR AS REPORTED, FROM 1873 TO 1895, INCLUSIVE—Continued.

ITALY.

Calendar year.	Gold.		Silver.	
	Fine ounces.	Value.	Fine ounces.	Coining value.
1873	190,501	$3,937,999	6,310,375	$8,158,869
1874	55,266	1,142,448	8,956,406	11,580,000
1875	20,955	433,177	7,463,672	9,650,000
1876	20,116	415,830	5,373,844	6,948,000
1877	46,196	954,956	2,686,922	3,474,000
1878	59,242	1,224,639	1,343,461	1,737,000
1879	27,349	565,355	2,985,469	3,860,000
1880	24,187	499,997	.....	.....
1881	157,412	3,253,988	1,236,221	1,598,346
1882	1,302,639	26,927,947	853,607	1,103,654
1883	37,976	785,027	1,045,723	1,352,046
1884	3,007	62,165	1,641,198	2,121,953
1885	30,760	635,873	178,533	230,831
1886	11,018	227,771	1,388,811	1,795,634
1887	.....	.....	4,836,459	6,253,200
1888	22,724	469,750	.....	.....
1889	.....	.....	46,567	60,208
1890	12,739	263,329	440,012	568,905
1891	6,130	126,708	146,284	189,135
1892	6,294	130,105	17,787	22,997
1893	7,696	159,086	.....	.....
1894	.....	.....	.....	.....
1895	.....	.....	.....	.....
Total	2,042,207	42,216,150	46,951,351	60,704,778

JAPAN.

1873	a 1,104,016	a $22,822,034	a 2,672,494	a $3,455,346
1874	a 516,908	a 10,685,440	a 2,842,935	a 3,675,714
1875	61,609	1,273,580	1,029,307	1,330,821
1876	18,467	381,744	1,518,286	1,963,037
1877	33,408	690,602	3,012,644	3,895,136
1878	19,161	396,087	3,497,576	4,522,118
1879	24,668	509,942	1,800,444	2,327,847
1880	22,270	460,365	1,606,394	2,076,955
1881	23,732	490,585	3,491,330	4,514,043
1882	27,363	565,645	3,377,906	4,367,393
1883	26,330	544,290	2,413,815	3,120,892
1884	27,545	569,415	2,784,307	3,599,912
1885	48,569	1,004,005	4,888,842	6,320,927
1886	43,545	900,165	7,027,513	9,086,077
1887	43,413	897,420	7,950,593	10,279,555
1888	47,133	974,335	7,906,162	10,222,108
1889	85,866	1,775,010	7,360,309	9,516,359
1890	57,762	1,194,050	5,643,499	7,296,645
1891	52,425	1,083,725	6,592,707	8,523,904
1892	63,832	1,319,525	9,518,743	12,307,062
1893	63,181	1,306,070	9,513,827	12,300,705
1894	76,260	1,576,440	18,664,101	24,131,363
1895	73,288	1,515,000	18,472,398	23,883,505
Total	2,560,751	52,935,474	133,586,132	172,717,424

a Fiscal years.

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COINAGES OF THE PRINCIPAL COUNTRIES OF THE WORLD, SO FAR AS REPORTED, FROM 1873 TO 1895, INCLUSIVE—Continued.

MEXICO.

Calendar year.	Gold.		Silver.	
	Fine ounces.	Value.	Fine ounces.	Coining value.
1873	30,802	$636,738	17,499,847	$22,626,065
1874	100,714	2,081,949	13,164,992	17,021,405
1875	41,923	866,619	14,994,600	19,386,958
1876	39,010	806,417	15,051,528	19,460,562
1877	33,657	695,750	16,563,263	21,415.128
1878	33,475	691,998	17,080,751	22,084,203
1879	31,841	658,206	17,141,685	22,162,987
1880	.....	.....	.....	.....
1881	21,226	438,778	18,670,026	24,139,023
1882	21,894	452,590	19,449,060	25,146,260
1883	19,718	407,600	18,627,408	24,083,921
1884	15,901	328,696	19,627,815	25,377,378
1885	20,475	423,250	19,986,187	25,840,727
1886	17,777	367,490	20,876,473	26,991,804
1887	19,284	398,647	20,762,180	26,844,031
1888	14,536	300,480	20,619.042	26,658,964
1889	15,476	319,907	19,563,889	25,294,726
1890	13,780	284,859	18,625,297	24,081,192
1891	13,572	280,565	18,943,860	24,493,071
1892	13,313	275,203	20,714,761	26,782,721
1893	23,857	493,167	21,660,423	28,005,396
1894	26,805	554,107	22,801,736	29,481,033
1895	24,390	504,193	19,206,271	24,832,351
Total	593,426	12,267,209	411,631,094	532,209,906

NETHERLANDS.

1873	.....	.....	4,318,884	$5,584,011
1874	*a* 9,452	*a* $195.400	10,020,403	12,955,673
1875	799,214	16,521,210	.....	.....
1876	312,396	6,457,800	49,414	63,889
1877	217,123	4,488,341	44,983	58,160
1878	9,639	199,250	44,983	58,160
1879	116,256	2,403,223	34,655	44,806
1880	12,545	259,336	310,922	402,000
1881	.....	.....	62,184	80,400
1882	.....	.....	470,491	608,312
1883	.....	.....	62,722	81,095
1884	.....	.....	310,922	402,000
1885	22,018	455,145	621,844	804,000
1886	10,529	217,647	.....	.....
1887	7,925	163,831	59,075	76,380
1888	6,920	143,052	.....	.....
1889	39,858	823,943	102,604	132,660
1890	.....	.....	153,914	199,000
1891	.....	.....	283,852	367,000
1892	12	245	1,212,595	1,567,800
1893	.....	.....	435,291	562,800
1894	3,430	70,897	124,369	160,800
1895	6,564	135,692	108,823	140,700
Total	1,573,881	32,535,012	18,832,930	24,349,646

a 1873 and 1874.

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COINAGES OF THE PRINCIPAL COUNTRIES OF THE WORLD, SO FAR AS REPORTED, FROM 1873 TO 1895, INCLUSIVE—Continued.

PORTUGAL.

Calendar year.	Gold.		Silver.	
	Fine ounces.	Value.	Fine ounces.	Coining value.
1873	.....	.....	.....	.....
1874	.....	.....	.....	.....
1875	.....	.....	.....	.....
1876	.....	.....	.....	.....
1877	4,310	$89,100	41,348	$53,460
1878	14,211	293,702	8,311	10,746
1879	12,696	262,451	307,019	396,954
1880	15,464	319,680	103,579	133,920
1881	11,860	245,160	.....	.....
1882	7,837	162,000	.....	.....
1883	10,501	217,080	.....	.....
1884	9,038	186,840	.....	.....
1885	11,912	246,240	.....	.....
1886	8,689	179,626	231,849	299,765
1887	13,061	270,000	742,593	960,120
1888	4,963	102,600	1,186,144	1,533,600
1889	4,650	96,120	526,247	680,400
1890	19,696	407,160	417,656	540,000
1891	8,202	169,560	5,628,336	7,277,040
1892	.....	.....	2,378,970	3,075,840
1893	.....	.....	1,092,589	1,412,640
1894	.....	.....	370,043	478,440
1895	.....	.....	92,720	119,880
Total	157,090	3,247,379	13,127,404	16,972,805

RUSSIA.

1873	585,723	$12,107,964	3,104,686	$4,014,139
1874	954,091	19,722,820	2,970,373	3,840,482
1875	829,278	17,142,693	2,950,513	3,814,805
1876	2,072,507	42,842,525	6,019,049	7,782,205
1877	1,278,671	26,432,484	3,149,571	4,072,172
1878	1,333,444	27,564,735	4,620,647	5,974,170
1879	1,348,758	27,881,306	4,987,417	6,448,378
1880	1,168,613	24,157,383	4,486,157	5,800,284
1881	1,013 446	20,949,779	2,153,771	2,784,674
1882	848,832	17,546,908	259,675	335,742
1883	618,889	12,793,575	.....	.....
1884	900,504	18,615,074	958,093	1,238,746
1885	1,000,678	20,685,852	746,189	964,769
1886	714,098	14,761,717	1,008,641	1,304,101
1887	972,786	20,109,276	1,200,151	1,551,710
1888	989,776	20,460,491	899,605	1,163,126
1889	912,115	18,855,097	892,276	1,153,651
1890	1,051,007	21,726,239	1,248,655	1,614,422
1891	102,119	2,110,981	2,081,245	2,690,902
1892	26,892	555,909	2,258,812	2,920,484
1893	112,012	2,315,493	1,933,496	2,499,874
1894	112,011	2,315,481	180,877	233,861
1895	1,866,812	38,590,432	2,858,774	3,696,192
Total	20,813,062	430,244,214	50,968,673	65,898,889

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COINAGES OF THE PRINCIPAL COUNTRIES OF THE WORLD, SO FAR AS REPORTED, FROM 1873 TO 1895, INCLUSIVE—Continued.

SCANDINAVIAN UNION (DENMARK, NORWAY, AND SWEDEN).

Calendar year.	Gold.		Silver.	
	Fine ounces.	Value.	Fine ounces.	Coining value.
1873	29,846	$616,979	1,543,231	$1,995,288
1874	117,005	2,418,700	168,416	217,750
1875	112,730	2,330,344	1,744,505	2,255,521
1876	109,603	2,265,685	3,320,499	4,293,170
1877	91,478	1,891,009	195,213	252,397
1878	167,877	3,470,327	291,056	376,315
1879	144,719	2,991,612	1,503,872	1,944,401
1880	36,426	752,992	172,935	223,593
1881	16,461	340,275	246,778	319,067
1882	1,929	39,876	67,588	87,387
1883	30,444	629,327	222,740	287,988
1884	49,460	1,022,420	102,700	132,784
1885	a1,119,704	a23,146,332	a5,668,697	a7,329,225
1886	73,611	1,521,672	10,537	13,624
1887	15,230	314,830	105,560	136,482
1888	.....	.....	102,710	132,797
1889	52,247	1,080,040	203,925	263,660
1890	66,823	1,381,363	289,627	374,467
1891	.....	.....	214,822	277,750
1892	.....	.....	341,707	441,803
1893	.....	.....	134,246	173,571
1894	7,993	165,239	223,242	288,636
1895	43,389	896,921	62,184	80,400
Total	2,286,975	47,275,943	16,936,790	21,898,076

a Denmark from 1873 to 1885: Gold, $23,112,832; silver, $7,197,344—equivalent to 1,118,083 ounces of gold and 55,666,957 ounces of silver.

SOUTH AMERICAN STATES.

1873	.....	.....	.....	.....
1874	.....	.....	.....	.....
1875	13,712	$283,462	2,898,424	$3,747,457
1876	894	18,480	140,309	181,410
1877	16,192	334,720	877,990	1,135,179
1878	2,821	58,320	239,745	309,973
1879	.....	.....	.....	.....
1880	22,413	463,322	1,721,975	2,226,392
1881	7,108	146,939	3,860,213	4,990,983
1882	1,234	25,508	1,310,868	1,694,859
1883	221,703	4,583,011	3,123,255	4,038,148
1884	.....	.....	1,083,546	1,400,949
1885	54,195	1,120,318	1,471,415	1,902,436
1886	100,305	2,073,498	3,271,400	4,229,689
1887	444,988	9,198,730	3,437,558	4,444,520
1888	437,556	9,045,077	5,702,556	7,373,002
1889	.....	.....	2,365,688	3,058,667
1890	.....	.....	2,198,519	2,842,530
1891	1,271	26,279	4,141,170	5,354,240
1892	.....	.....	5,741,793	7,423,733
1893	.....	.....	4,211,883	5,445,667
1894	.....	.....	4,409,748	5,701,492
1895	404,087	8,353,212	8,058,648	10,419,262
Total	1,728,479	35,730,876	60,266,703	77,920,588

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COINAGES OF THE PRINCIPAL COUNTRIES OF THE WORLD, SO FAR AS REPORTED, FROM 1873 TO 1895, INCLUSIVE—Continued.

SPAIN.

Calendar year.	Gold.		Silver.	
	Fine ounces.	Value.	Fine ounces.	Coining value.
1873	.....	.....	5,122,259	$6,622,719
1874	.....	.....	8,200,999	10,603,312
1875	.....	.....	10,180,557	13,162,741
1876	a1,704,097	a$35,226,814	7,040,707	9,103,136
1877	934,955	19,327,237	5,215,086	6,742,738
1878	1,920,668	39,703,726	6,820,293	8,818,156
1879	807,819	16,699,099	11,790,868	15,244,758
1880	1,601,876	33,113,719	208,020	268,955
1881	1,019,122	21,067,127	2,382,337	3,080,193
1882	96,571	1,996,310	8,254,003	10,671,842
1883	160,955	3,327,235	8,139,208	10,523,421
1884	241,053	4,983,004	5,212,173	6,738,971
1885	117,798	2,435,108	2,844,946	3,678,314
1886	114,637	2,369,765	3,911,665	5,057,506
1887	.....	.....	8,809,000	11,389,414
1888	.....	.....	3,431,591	4,436,804
1889	163,441	3,378,631	3,814,544	4,931,936
1890	437,773	9,049,569	1,144,032	1,479,152
1891	.....	.....	9,468,422	12,242,000
1892	453,809	9,381,062	6,897,407	8,917,860
1893	.....	.....	2,545,066	3,290,591
1894	.....	.....	3,052,158	3,946,225
1895	.....	.....	159,057	205,649
Total	9,774,574	202,058,406	124,644,398	161,156,393

a 1873 to 1876, inclusive.

LI.—MONETARY STATISTICS OF FOREIGN COUNTRIES.

[For the interrogatories addressed to the representatives of the United States in foreign countries see page 157 of this report.]

TRANSCRIPTS.

ARGENTINA.

LEGATION OF THE UNITED STATES,
Buenos Ayres, May 15, 1896.

SIR: In reply to your circular of January, forwarded by the Department of State, I beg to say that I find it impossible to reply in a satisfactory manner to many of the questions contained therein, although I have made every endeavor to do so.

I can do no more than to submit the following imperfect answers to the inquires you make:

Replies to interrogatories, 1895.

(1) None (gold coinage).
(2) None (silver coinage).
(3, 4, 5, and 6) Impossible to answer (gold and silver used in the industrial arts).
(7) The amount of gold imported during 1895 was as follows:

From the United States:	United States gold.
November 20	$400,000
December 4	500,000
December 31	500,000
	1,400,000
From England (£1,005,701)	4,893,741
From France (600,000 francs)	115,800
From Brazil (274,285 reis)	149,812
Total	6,559,353

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The above figures may be somewhat less than the total amount, as I have not heard from two of the steamship companies to which I have applied for the statistics covering the sum brought out during the year by their ships, and from these sources, I may add, I am indebted for the figures given above. I do not anticipate, however, that their replies will change the result, as it is not probable that the two lines I refer to brought out any sums of importance. Should I receive a reply from them I shall take pleasure in transmitting the information I may obtain.

Replies received to inquiries made at the leading banks lead me to believe that little, if any, gold was exported, as the exchange rates during the year have been favorable.

(8) None, unless in small quantities to be sold on account, as metal (silver imports).

(9) Answered as far as possible in reply to No. 7. It is impossible to say what proportion of the gold imported from the United States was United States coin.

(10) Answered in reply to No. 7.

(11) None (United States gold coin deposited at mints or melted).

(12, 13, 14, and 15) No statistics are published by this Government with reference to the output of gold and silver from the few mines in this Republic. The reason given is that the industry is such a small one and the mines in operation so far removed from the capital that it is exceedingly difficult to secure information or statistics of an accurate character.

(16) Estimated at $20,000,000 (approximate stock of gold coin and bullion in the country).

(17) Can not answer. Silver is not used as currency.

(18) According to official statistics, the amount of outstanding currency on March 31, 1895, excluding gold and silver, amounted to $296,643,023.

(19) There are none not included in the answer to question No. 18.

(20 and 21) No answer. See reply to question No. 18.

(22) Inconvertible paper, the value of which is fixed by the daily quotations of gold. Customs dues are payable in gold, or in paper at the rate daily fixed by the minister of hacienda.

(23) Yes; the average premium during the year 1895 was 244.33; the highest, 278.50; the lowest, 214.50.

(24) 48.152d.

(25) None of importance, with the exception of the law regarding the issuance of nickel coins to take the place of the 5, 10, 20, and 50 cent paper currency. This law will be found on page 234 of the Digest, which is inclosed under separate cover.

(26) Yes, but not issued separately. It is printed and forms a part of the annual report of the minister of hacienda, whose report for 1895 has not yet been issued.

I have the honor to be, sir, very respectfully, yours,

WILLIAM I. BUCHANAN.

The DIRECTOR OF THE MINT, *Washington, D. C.*

LEGATION OF THE UNITED STATES,
Buenos Ayres, October 13, 1896.

SIR: During last year's session of the Argentina Congress a law was passed authorizing the withdrawal from circulation of all fractional paper currency under 50 cents and the issue of a new series of nickel coins in place thereof.

Through its legation in London the Government asked for proposals to supply the nickel that would thus be needed. A number of bids were received, the lowest, 2s. 6d. per kilogram for the metal, in discs, being submitted by Krupp, of Germany, to whom the contract was awarded.

The national mint is now ready to begin the issue of this new money and it will be at once put into circulation.

There will be coined 5,000,000 5-cent pieces, 8,700,000 10-cent pieces, and 6,800,000 20-cent pieces. Their size and weight will be as follows:

Denominations.	Diameter.	Weight.
	Millimeters.	*Grams.*
5-cent pieces	17	2
10-cent pieces	19	3
20-cent pieces	21	4

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The public look upon this new issue as a most excellent undertaking, as the present paper fractional currency of the country is believed to be the source of many cases of infectious disease and has, therefore, come to be thoroughly disliked.

Upon the new coins coming into circulation I shall forward specimens to the Department.

I have the honor to be, sir, your obedient servant,

WILLIAM I. BUCHANAN.

Hon. RICHARD OLNEY,
Secretary of State, Washington, D. C.

LEGATION OF THE UNITED STATES,
Buenos Ayres, October 9, 1896.

SIR: I have been informed by the director of the department of mines and geology that according to the most reliable data that his department has been able to secure, there was taken from mines in the Argentine Republic during last year 473.86 kilos of gold, 10,210 kilos of silver, and 389,900 kilos of copper. The countries to which this output was exported were Germany, England, France, Belgium, and Italy.

It is confidently believed, however, by the director that the mineral output of this country was very much greater during the past year than the above figures would seem to indicate. Constant efforts are being made to locate new and profitable mining possibilities in many parts of the Andes, and a renewed interest in mining is being manifested here on every hand.

I have, etc.,

WILLIAM I. BUCHANAN.

Hon. RICHARD OLNEY,
Secretary of State, Washington, D. C.

AUSTRALASIA.

MELBOURNE, *March 9, 1896.*

SIR: I have the honor to inclose a statement showing the quantity of gold and silver produced in Australasia during 1895, according to the estimates furnished by the governments of the various colonies, expressed in gross ounces.

I also forward a statement of the gold coinages executed at the Sydney and Melbourne branches of the Royal mint during 1895.

I have the honor to be, sir, your obedient servant,

ROBERT BARTON, *Deputy Master.*

The DIRECTOR OF THE MINT, *Washington, D. C.*

STATEMENT OF THE GOLD COINED AT THE BRANCHES OF THE ROYAL MINT AT MELBOURNE AND SYDNEY DURING 1895.

Melbourne	£4,165,869
Sydney	2,758,000
Total	6,923,869

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RETURN OF THE WEIGHT AND VALUE OF GOLD RECEIVED FOR COINAGE AT THE SYDNEY MINT, DISTINGUISHING THE COUNTRIES IN WHICH THE GOLD WAS PRODUCED.

Period.	New South Wales.		Queensland.		New Zealand.	
	Weight.	Gross value.	Weight.	Gross value.	Weight.	Gross value.
1855 to 1884..	*Ounces.* 6,808,290.09	£ s. d. 26,044,614 7 1	*Ounces.* 3,662,025.05	£ s. d. 13,050,499 8 9	*Ounces.* 2,024,322.22	£ s. d. 7,988,897 13 3
1885....	93,990.36	340,802 6 11	300,108.08	1,063,807 17 0	1,561.06	4,726 0 5
1886....	91,854.72	330,779 7 7	329,357.26	1,169,128 8 9	34,518.80	139,615 4 8
1887....	105,268.71	375,787 16 3	426,110.35	1,530,348 3 3	53,100.94	218,082 12 4
1888....	82,891.29	299,837 12 0	495,183.10	1,760,873 13 3	3,204.81	11,122 19 11
1889....	114,486.29	414,026 15 8	732,447.03	2,722,026 3 5	4,653.48	17,650 9 3
1890....	119,563.90	435,982 16 9	619,366.87	2,253,363 1 1	44,230.25	176,469 15 10
1891....	142,470.23	518,249 5 5	541,533.53	1,908,799 3 0	84,348.86	323,521 8 11
1892....	144,259.48	522,865 17 4	578,756.86	2,015,548 17 1	56,963.78	223,936 13 3
1893....	171,097.07	619,070 15 8	585,042.42	2,036,510 13 0	85,218.56	337,065 15 1
1894....	222,988.17	785,952 7 7	579,299.54	2,031,419 12 0	44,855.40	181,291 0 7
1895....	202,317.03	746,702 15 3	470,794.26	1,665,985 6 4	83,851.35	344,181 14 11
Total	8,299,477.34	31,434,672 3 6	9,320,024.35	33,208,310 6 11	2,520,829.51	9,966,561 8 5

Period.	Victoria.		Tasmania.		South Australia.	
	Weight.	Gross value.	Weight.	Gross value.	Weight.	Gross value.
1855 to 1884..	*Ounces.* 1,437,954.16	£ s. d. 5,905,725 8 1	*Ounces.* 6,114.17	£ s. d. 23,624 18 7	*Ounces.* 22,884.82	£ s. d. 82,800 2 11
1885....	60.27	239 7 5	30.51	125 11 5	10,457.87	38,298 13 7
1886....	80.18	110 0 9	11.80	46 6 2	8,581.07	30,704 2 6
1887....	49.43	98 14 5	5,632.66	20,981 3 7	5,625.51	20,790 9 1
1888....	7.33	13 8 1	14.90	39 8 3	2,147.24	7,695 19 11
1889....	2,820.36	10,769 7 6	.....	.....	4,364.59	13,867 16 0
1890....	680.42	2,477 6 6	.....	.....	7,851.11	27,132 10 6
1891....	653.80	2,524 19 3	.....	.....	12,932.85	44,507 13 9
1892....	12.27	46 17 7	.....	.....	3,592.68	12,548 15 3
1893....	101.05	417 10 8	105.55	369 5 11	183.36	618 14 3
1894....	252.21	1,017 18 7	238.49	685 13 11	113.34	331 4 11
1895....	17.80	70 1 0	38.97	132 10 10	.....	.....
Total	1,442,689.28	5,923,510 19 10	12,187.05	46,004 18 8	78,734.44	279,296 2 8

Period.	Other countries		Coin.		Total.	
	Weight.	Gross value.	Weight.	Gross value.	Weight.	Gross value.
1855 to 1884..	*Ounces.* 12,065.05	£. s. d. 40,154 9 8	*Ounces.* 134,902.53	£. s. d. 521,519 11 1	*Ounces.* 14,108,558.09	£. s. d. 53,657,835 19 5
1885....	91.99	340 3 5	15,860.06	61,721 10 1	422,160.20	1,510,061 10 3
1886....	302.15	1,141 17 8	10,460.23	40,719 0 4	475,166.21	1,712,244 8 5
1887....	1,694.39	6,348 6 9	224.83	868 14 0	597,706.82	2,173,305 19 8
1888....	964.89	3,635 6 3	25,430.06	99,013 0 0	609,843.62	2,182,231 7 8
1889....	1,606.89	6,042 5 1	40,096.58	156,090 4 7	900,475.22	3,340,473 1 6
1890....	807.02	3,017 12 11	11,623.42	45,231 17 8	804,122.99	2,943,675 1 3
1891....	865.35	3,200 6 2	4,420.72	17,198 16 9	787,225.34	2,818,001 13 3
1892....	1,505.75	5,426 0 10	117.41	455 17 11	785,208.23	2,780,828 19 3
1893....	1,723.96	6,218 7 1	110.23	425 1 0	843,582.20	3,000,696 2 8
1894....	4,894.46	17,374 10 11	17,139.99	66,705 14 5	869,781.60	3,084,778 2 11
1895....	3,075.89	11,273 4 6	26.08	101 8 8	760,121.38	2,768,447 1 6
Total..	29,597.79	104,172 11 3	260,412.14	1,010,050 16 6	21,963,951.90	81,972,579 7 9

AUSTRIA.

LEGATION OF THE UNITED STATES,
Vienna, June 10, 1896.

SIR: In accordance with instructions from the State Department, I have the honor to inclose herein translation of a note just received from the ministry of foreign affairs in answer to certain questions submitted by the United States Government in relation to the coinage of gold and silver and circulation of State and bank notes for the year 1895 in Austria.

I have the honor to be, sir, your obedient servant,

LAWRENCE TOWNSEND,
Chargé d'Affaires ad interim.

THE DIRECTOR OF THE UNITED STATES MINT,
Washington, D. C.

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[Translation.]

VIENNA, *May 31, 1896.*

SIR: Referring to the esteemed note of February 17, last, the ministry of foreign affairs has the honor of transmitting herewith to the honorable chargé d' affaires the following information concerning all the changes made in precious metals in Austria during the year 1895:

Replies to interrogatories, 1895.

(1 and 2) There were coined in 1895, at the principal Imperial mint in Vienna, the following gold pieces:

	Pieces.	Value.
		Florins.
20-crown	2,265,926	22,659,260.00
Quadruple ducats	40,337	910,809.46
Single ducats	356,964	2,015,061.78
Total	2,663,227	25,585,131.24

Aside from gold bars, etc., there were used in coining the above-mentioned pieces—

Description.	Kilograms.	Kilograms fine.
Domestic coins	590.5007	573.1329
Foreign coins	19,228.3337	17,330.0610
Total	19,818.8344	17,903.1939

There were coined at the principal Imperial mint in Vienna the following silver pieces:

Description.	Pieces.	Value.
		Florins.
1-crown pieces	15,115,500	7,557,750
Levantine dollars (trade coins)	2,301,110	(*a*)

a Without any fixed value in Austrian currency.

Aside from silver bars, there were used in coining the above-mentioned silver pieces—

Description.	Kilograms.	Kilograms fine.
Domestic coins	181,256.480	79,793.298
Foreign coins	87.053	58.858
Total	181,343.533	79,852.156

(3 to 6) The statements of the stamping office for 1895 show that there were submitted for official stamping during that year—

	Kilograms.
Inland articles of gold	3,573.593
Inland articles of silver	54,546.611

No reports have been received yet which show the amount of gold and silver used in the manufacture of the last-mentioned articles.

The gold used in the year 1894 for industrial purposes consisted of—

	Kilograms.
Coins	1,849.5334
Alloyed gold	215.4447
Gold scrapings	160.9934
Fine gold	153.4080
Total	2,379.3795

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The silver used in the year 1894 for industrial purposes consisted of—

	Kilograms.
Coins	2,041.379
Alloyed silver	1,836.307
Silver scrapings	1,082.015
Fine silver	46,183.721
Total	51,143.422

(7 and 8) There were imported in 1895—

Description.	Weight.	Value.
Gold:	*Kilograms.*	*Florins.*
In coins	30,279	43,164,007
Raw, in bars, and scrapings	5,484	8,214,776
Total	35,763	51,378,783
Silver:		
In coins	4,381	222,866
Raw, in bars, and scrapings	49,436	2,487,782
Total	53,817	2,710,648

There were exported in 1895—

Description.	Weight.	Value.
Gold:	*Kilograms.*	*Florins.*
In coins	15,346	20,926,387
Raw, in bars, and scrapings	1,817	532,517
Gold ore	11,000	88
Total	28,163	21,458,992
Silver:		
In coins	47,375	2,037,860
Raw, in bars, and scrapings	2,500	108,393
Total	49,875	2,146,253

There were imported also in 1895—

Description.	Weight.	Value.
	Kilograms.	*Florins.*
Gold scraping in melted state	4,200	8,400
Silver scraping in melted state	300	420

and exported—

Description.	Weight.	Value.
	Kilograms.	*Florins.*
Gold scraping in melted state	115,400	461,600
Silver scraping in melted state	88,400	123,760

The total import of precious metals in 1895 was: Gold for 51,387,183 florins; silver for 2,711,068 florins.

The total export of precious metals in 1895 was: Gold for 21,920,592 florins; silver for 2,270,013 florins, making an excess of import over export, of gold, 29,466,591 florins; silver, 441,055 florins. The valuation of the imports and exports is made by the I. R. permanent commission appointed to give these rates.

(9 and 10) The total import of United States gold and gold coin during 1895 can not be given.

(11) For the coinage made by the Imperial mint of Vienna during 1895, gold pieces of the United States of America were used, weighing 1,936.0366 kilograms (1,742.4319 kilograms fine).

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(12 to 15) No replies can yet be given to these questions. They will be answered at some subsequent time.

(16 and 17) While the ministry of finances will give at some later period of time detailed replies to these questions, it thinks proper to say that at the end of 1895 there were deposited for the purpose of changing the currency—

	Florins.
At the Government vaults in Vienna	29,047,264.12½
At the principal mint	24,031,303.70
Total	53,078,567.82½

Aside from this, there were deposited in the different treasuries and offices 41,698,700.20 florins in gold. At the Austro-Hungarian Bank there were deposited at the same period of time 244,091,527.19 florins in gold coins and 6,827,247.81 florins in gold bonds and securities. Total amount of gold deposited in the above-named places, 292,617,475.20 florins.

Of silver coins there were on hand at the end of 1895—

	Florins.
At the different treasuries	8,115,263.36½
At the Austro-Hungarian Bank	126,602,571.00
Total	134,717,834.36½

(18 and 19) The circulation of State notes issued under common guarantee of both parts of the Empire at the end of December, 1895, amounted to 193,539,593 florins, Austrian currency. (The circulation of State notes was reduced by redemption, in conformity with the law of the year 1894, to the amount of 157,136,108 florins.) The circulation of the bank notes issued by the Austro-Hungarian Bank at the end of 1895 amounted to 619,854,140 florins.

(20 and 21) The State notes in circulation at the end of 1895 are fully covered by gold deposited in the Austrian and in the Hungarian treasury, with the exception of 38,675,701 florins, which have been temporarily put into circulation in place of the salt mining[1] shares. This gold will gradually be employed for their redemption.

On the 31st of December, 1895, there were deposited in the Austro-Hungarian Bank 244,091,527.19 florins in gold, 126,602,571 florins in silver, 6,827,247.81 florins in bonds and securities. The amount of notes in circulation in excess of the foregoing sum was fully covered.

(22) This question has been answered by reply given to question No. 19 in the report for 1894, viz: "The crown currency was legally established by the law of August 2, 1892, but the florin currency is still retained and in force. The actual currency consists of silver florins, 1-crown pieces, and paper currency, the redemption of which against coin is suspended."

(23) If the average rate of exchange of the 20-franc piece as quoted at the Vienna Exchange during the year 1895 is taken at 9.67 florins and compared with the corresponding value of that coin in the crown currency, which is 9.52 florins, it is shown that the average premium on gold in the year 1895 was 1.57 per cent.

(24) The exchange on London for 10 pounds sterling during 1895 was, at an average, 121.89 florins.

(25) No laws were passed during the year 1895 affecting the coinage, issue, or legal-tender character of the metallic or paper currency.

(26) Referred to volume 2 of the new edition of the Tabellen zur Währungs Statistic, transmitted some time ago to the Director of the United States Mint.

While the undersigned begs to add that the corresponding data concerning Hungary will be transmitted as soon as prepared, he avails himself at the same time of this opportunity to renew to the honorable chargé d'affaires of the United States of America the assurances of his highest consideration.

For the minister:

WELSERSHEIMB.

Hon. LAWRENCE TOWNSEND,
Chargé d'Affaires of the United States.

LEGATION OF THE UNITED STATES,
Vienna, August 19, 1896.

SIR: Referring to Mr. Townsend's letter of June 10 last, inclosing answers to certain questions relating to the coinage of gold and silver in Austria during 1895, I

[1] Monopoly of State.

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now have the honor to transmit herewith translation of a note just received from the foreign office containing replies to certain questions which had then to be left unanswered.

I have the honor to be, sir, your obedient servant,

BARTLETT TRIPP.

The DIRECTOR OF THE MINT, *Washington, D. C.*

[Translation.]

VIENNA, *August 17, 1896.*

To the United States Legation at Vienna:

The ministry of foreign affairs has the honor of transmitting herewith to the United States legation replies to the questions which were left unanswered in the letter of May 31 last to the Director of the Mint at Washington:

(12) During 1895 the mines yielded 103.931 kilograms of gold ore, amounting in value to 38,997 florins.

(13) During 1895 the mines yielded 18,113.420 kilograms of silver ore, amounting in value to 2,294,043 florins.

(14) The refineries in 1895 produced 75.091 kilograms of gold, amounting in value to 116,753 florins.

(15) The refineries in 1895 produced 40,080.776 kilograms of silver, amounting in value to 2,524,993 florins.

Similar statements concerning Hungary will be transmitted as soon as the necessary data are on hand.

For the minister:

WELSERSHEIMB.

HUNGARY.

LEGATION OF THE UNITED STATES,
Vienna, September 7, 1896.

SIR: In accordance with instructions I have the honor to inclose herein translation of a note received from the imperial and royal ministry of foreign affairs, in answer to certain questions submitted by the United States Government, relating to the coinage of gold and silver and circulation of State and bank notes in Hungary for the year 1895.

I have the honor to be, sir, your obedient servant

BARTLETT TRIPP.

The DIRECTOR OF THE MINT, *Washington, D. C.*

[Translation.]

VIENNA, *August 30, 1896.*

To the Legation of the United States at Vienna:

In pursuance of the note of the 17th of August last, the ministry of foreign affairs has the honor of transmitting herewith the data relating to the production of gold and silver in Hungary during 1895:

Answers to interrogatories, 1895.

(1) There were coined 1,935,250 20-crown gold pieces, amounting in value to 19,352,500 florins. There were recoined:

(*a*) Domestic gold pieces—ducats, 2,457, weighing 8.43212 kilograms, and 20 and 10 franc pieces of Austrian and Hungarian coinage, weighing 1.48905 kilograms; together, 2,714 pieces, weighing 9.92117 kilograms.

(*b*) Foreign gold coins—

Classification.	Pieces.	Weight.
	Francs.	*Kilograms.*
United States	3,050,550	4,590.42435
20 and 10 francs	252,178	1,461.34170
Germany	53,100	19.00890
Argentine Republic	200	1.59435
Russia	41	.24470
England	190	1.38390
Turkey	412	2.70153
Total	3,356,671	6,076.69943

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(2) There were coined 18,544,465 1-crown pieces of silver, valued at 9,272,232.50 florins. There were withdrawn from circulation of fractional currency 10,344,698 20-kreuzer pieces, weighing 12,534.8614 kilograms, and 14,800,000 10-kreuzer pieces, weighing 8,736.3541 kilograms; total, 25,144,698 pieces, with a fine weight of 21,271.2155 kilograms.

(3 and 5) No full data are on hand to give the amount of gold and silver used for industrial purposes. There were presented at the stamping office:

	Kilograms.
Plated wire, domestic, genuine	478.929
Alloyed wire, domestic, genuine	346.831
Alloyed wire, foreign, genuine	1.710
Domestic gold ware	1,180.536
Domestic silverware	5,724.068
Foreign gold ware	286.875
Foreign silverware	2,383.246

(4 and 6) No data are on hand to answer these questions.

(7 and 8) See inclosure for "Imports and exports."

(9 and 10) No data are on hand to answer these questions.

(11) See reply to question No. 1.

(12) Weight and value of the gold produced from the mines of the country during the calendar year 1895: 3,187.03663 kilograms fine; valued at 4,869,641.16 florins.

(13) Weight and value of the silver produced from the mines of the country during the calendar year 1895: 20,431.3355 kilograms fine; valued at 1,231,346.68 florins.

(14) Weight and value of the output of gold from the refineries of the country during the year: 841.92571 kilograms fine gold at the mint; valued at 1,380,757.76 florins.

(15) Weight and value of the output of silver from the refineries of the country during the year: 24,095.536 kilograms fine silver at the mint; valued at 1,353,826.27 florins.

(16 and 17) There were at the mint at the same time 793.7219 kilograms fine gold, and 31,294.8991 kilograms fine silver as raw material, remnants, and waste. In the Royal Hungarian treasury vaults there were coins of a value of 65,677,744 florins. Of the gold in circulation no data are on hand. Of silver coins (1-florin and 1-crown pieces) there were in circulation, inclusive of the deposits in the State vaults, about 14,000,000 1-florin silver pieces, and 16,500,000 1-crown pieces.

NOTE.—The supply of metal at the Austro-Hungarian Bank at the close of the year 1895 was 244,091,527 florins in gold and 126,602,571 florins in silver, which served to cover the bank notes in circulation in Hungary.

(18) Amount of Government notes outstanding at the end of the year: 234,849,193 florins in both parts of the Monarchy.

(19) Amount of bank notes outstanding at the end of the year: From the bank notes of the Austro-Hungarian Bank, 619,854,140 florins.

(20) The State notes are not covered.

(21) Amount of uncovered bank notes at the end of the year 1895, 231,213,000 florins.

(22) The currency is the same in both parts of the Empire, with the florin as a basis, containing one-ninetieth kilogram of fine silver. Since the free coinage of silver, however, has been discontinued, this basis has in fact ceased, and the Austrian currency has in fact become a paper currency.

The gold currency, the unit of which is the crown, was introduced in Hungary by the law of 1892. The value of the crown, i. e., $\frac{1}{3280}$ kilogram of fine gold, was fixed to be legally 50 kreuzers Austrain currency.

The monetary system is at present in a state of transition. Business transactions can be made in both currencies, and the forced circulation of the State and bank notes has not yet ceased, but the withdrawal of the State notes will soon take place.

(23) In consideration of the above-mentioned relation between the crown currency and the Austrian currency, gold in 1895 was at an average premium of 1.63 per cent.

(24) Average rate of exchange on London during 1895, 122.0492 per cent.

(25) No such laws have been passed during the year 1895.

No report has been made by the mint in the year 1895.

For the minister:

WELSERSHEIMB.

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IMPORTS AND EXPORTS.

Classification.	Imports.		Exports.	
	Quantity.	Value.	Quantity.	Value.
GOLD.				
Scrapings:	*Kilograms.*	*Florins.*	*Kilograms.*	*Florins.*
Austria	11.79	4,657	71.79	28,357
Germany	.....	.....	154.01	60,834
Italy	.....	.....	15.95	6,300
Servia	2.96	1,169	.....	.....
Total	14.75	5,826	241.75	95,491
Raw:				
Austria	1.29	216,243	.34	47,175
Germany	3.47	581,676	.27	37,463
Total	4.76	797,919	.61	84,638
Old and waste:				
Austria	.61	59,780	2.36	231,280
Bosnia	.01	980	.....	.....
Germany	.09	8,820	.....	.....
Bulgaria	.....	.....	.04	3,920
Total	.71	69,580	2.40	235,200
Coins:				
Austria	44.06	6,647,332	39.23	5,217,590
Bosnia	.72	108,626	.01	1,330
Germany	58.66	8,850,034	4.44	590,520
Switzerland	.14	21,122	.06	7,980
Italy	.....	.....	.55	73,150
France	.16	24,139	.47	62,510
Belgium	1.20	181,045	.....	.....
Holland	.01	1,509	.....	.....
Great Britain	.....	.....	1.50	199,500
Roumania	.72	108,626	.96	127,680
Servia	.03	4,526	.33	43,890
Bulgaria	.03	4,526	.02	2,660
Turkey in Europe	.03	4,526	.....	.....
Tunis	.....	.....	.03	3,990
Total	105.76	15,956,011	47.60	6,330,800
Medals:				
Austria	.09	11,250	.03	3,750
Germany	.....	.....	.01	1,250
Total	.09	11,250	.04	5,000
SILVER.				
Raw:				
Austria	17.48	90,896	4.89	22,494
Bosnia	.....	.....	.33	1,518
Germany	37.28	193,856	.20	920
France	.....	.....	1.81	8,326
Total	54.76	284,752	7.23	33,258
Old and waste:				
Austria	.20	890	4.22	18,779
Coins:				
Austria	87.21	418,608	63.46	304,608
Bosnia	1.48	7,104	1.14	5,472
Germany	3.14	15,072	11.63	55,824
Switzerland	.11	528	.12	576
France	.02	96	.01	48
Roumania	.12	576	3.58	17,184
Servia	1.21	5,808	.08	384
Bulgaria	.....	.....	.02	96
Turkey in Europe	.....	.....	.03	144
Total	93.29	447,792	80.07	384,336
Scrapings:				
Austria	2.00	60	26.50	795
Germany	.....	.....	25.31	759
Total	2.00	60	51.81	1,554

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THE AUSTRO-HUNGARIAN BANK.

[From the Banker's Magazine, London, March, 1896.]

The secretary-general of the Austro-Hungarian Bank, Mr. Emil von Mecenseffy, has issued a most minute and voluminous report on the administration of this important institution during the years 1886 to 1895. The volume contains no less than 78 tables, as well as a map, indicating the 57 towns in which this bank has its offices. The publication seems particularly opportune at a moment like the present, when the renewal of the privileges of this bank is under discussion, and when a correct idea of its splendid organization and of the immense assistance which this institution has given to the development of the economic resources and to the financial stability of the Austro-Hungarian Monarchy is of the utmost importance.

The Austro-Hungarian Bank dates from 1817. Up to the year 1858 there was no obligation whatsoever as to the proportion of the metallic reserve to be held against the note issue. In the latter year it was enacted that the notes had to be covered one-third by specie, but this was altered in 1862, when the privileges of the bank were renewed for a third time. Then it was enacted that 200,000,000 florins fiduciary bank notes might be issued, but any amount beyond this sum was to be covered by specie. This enactment proved insufficient; it had to be departed from during the year 1870–71, and during the crisis of 1873 this bank act had actually to be suspended. In 1887 the privilege of the bank was renewed till December 31, 1897, on the basis of an issue of 200,000,000 florins, covered two-fifths by specie, and a duty of 5 per cent per annum on all notes issued beyond this amount. These stipulations were made on the lines of the German bank act. They have worked on the whole satisfactorily and enabled the credit system of Austria-Hungary to make great progress. In 1892, after the passing of the monetary reform bills in Austria, the bank altered its articles so as to make the issue of bank notes against purchasers of gold coins or gold bars at the new mint rates compulsory; a regulation, which, however, has, so far, not been of practical value, as ever since 1892 gold has been at a premium in Austria. The publication gives a full account of all the documents relating to the bank and its constitution and its rules, of the bullion held, the notes issued and in circulation, in addition to the details of the business done during the last ten years.

BELGIUM.

LEGATION OF THE UNITED STATES,
Brussels, February 15, 1896.

SIR: I have the honor to acknowledge the receipt of Department circular dated February 4, instructing me to apply to the Belgian Government for answers to interrogatories set forth in a circular of the Treasury Department, and requesting that answers to interrogatories Nos. 12, 13, 14, and 15 should be procured and forwarded at the earliest practicable date.

As these questions refer to the productions of gold and silver mines, and as each year the Belgian Government replies that they do not apply to Belgium, as there are no gold or silver mines in this country, I have not deemed it necessary to request a reply to these interrogatories in advance of the remaining questions.

I have the honor to be, sir, your obedient servant,

JAS. S. EWING.

Hon. RICHARD OLNEY,
Secretary of State, Washington, D. C.

LEGATION OF THE UNITED STATES,
Brussels, July 20, 1896.

SIR: In accordance with a circular instruction received from the Secretary of State relative to coinage statistics in Belgium for the past year, I have the honor to inclose herewith a translation of the responses made to your questions by the Belgian minister of finance.

I am, sir, your obedient servant,

JAS. S. EWING.

The DIRECTOR OF THE MINT, *Washington, D. C.*

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Answers to interrogatories, 1895.

(1 and 2) Amount of gold and silver coined and recoined during 1895: None. (Two tables of coinage—Table I, national coins; Table II, foreign coins.)

(3 to 6) As a result of the law of the 5th day of June, 1868, which decreed the liberty of working gold and silver outside of coinage, it is impossible to produce the figures for the weight of gold and silver employed in the industrial arts.

(7) Imports and exports of gold (including platina) during 1895:

	Imports.	Exports.
	Pounds.	*Pounds.*
Gold ore	143.2990	
Gold bullion	5,983.2844	1,968.7078
Gold coined		13,948.5042
	Francs.	*Francs.*
Jewelry and goldsmiths' ware	2,617,455	387,131

(8) Imports and exports of silver during 1895:

	Imports.	Exports.
	Pounds.	*Pounds.*
Silver ore	2,859,520.5220	42,769.2400
Silver bullion	17,495.7056	99,866.1754
Silver coined	153,973.6732	106,539.4996
	Francs.	*Francs.*
Jewelry and goldsmiths' ware	1,719,199	257,258

It is not possible to give, separately, information as to precious metals in ingots, the latter being indicated, in the Commercial Movement of Belgium, under the headings "Gold bullion" or "Silver bullion," which comprise also dust, filings, and waste.

(9) Total import of United States gold coin during 1895 was 412 kilograms (908.2952 pounds).

(10) Total import of gold from the United States direct in 1895 was: Coined gold, 412 kilograms (908.2952 pounds).

(11 and 12) Amount of United States gold coin deposited at the mints and melted, and value of the gold produced from the mines of the country during 1895: None.

(13) Value of silver produced from the mines of the country during 1895: Prior to 1884 an insignificant quantity (66.1380 pounds of pure silver per year on the average) was extracted from the argentiferous galena produced in Belgium. Since that time the extraction of silver ore within Belgian territory is null.

(14 and 15) Weight and value of the output of gold and silver from the refineries of the country during 1895: There exists no longer in Belgium any refinery properly so termed. However, with regard to silver, two establishments treat silver ore imported from abroad. Their production of pure silver was, in 1895, 69,537.4932 pounds. A third establishment treats argentiferous lead ores, also imported from abroad. Its production of pure silver during its fiscal year, April 1, 1894, to March 31, 1895, was 213,012.8612 pounds.

(16 and 17) Approximate stock of gold and silver coin and bullion in the country at the close of the calendar year 1895: From a letter of the national bank, dated February 11, 1896, it results that it is impossible to answer these two questions precisely. This letter states that an inquiry made in 1880 fixes as follows the proportion between gold and silver of the deposits made in the bank during the year 1880: Sixty-six per cent in gold and 34 per cent in silver. The stock of silver coin (in 5-franc pieces) in circulation was estimated at that time at 275,000,000 francs. No figures were given for gold. The bank adds:

"No work of this nature having been performed during the year 1895, we can not establish the above-mentioned proportion for that year, but we can affirm with certainty that it was considerably altered, and that the deposits in silver were much more considerable in amount than were those in gold. We estimate these deposits at 75 per cent silver and 25 per cent gold. This proportion may seem in complete disaccord with the statement of the bank's stock in coin. In this statement the 5-franc pieces enter for a slight proportion. On the 3d day of this month this statement appears, as follows: Gold, 88,000,000; silver, 14,000,000."

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The explanation is found in the fact that the bank is very parsimonious of its gold and generally makes its specie payments with pieces of 5-francs, in order to prevent the exportation of its gold to France—the exchange being generally unfavorable to Belgium.

Without giving any figures for the monetary stock of Belgium, the bank concludes by saying:

"In a general way, we believe that we may affirm that the monetary stock of Belgium (gold and silver) has been considerably reduced during the last few years. The principal reason for this has been the exportation of coin into France on account of the habitually unfavorable state of the exchange on that country."

(18) The Government does not issue any notes of the kind in question.

(19) Notes of the national bank (only bank of issue in the country) in circulation on the 31st day of December, 1895: 476,502,020 francs.

(20) (See answer to question 18.)

(21) The notes of the national bank may be considered as entirely covered. In order to demonstrate this an extract from the report of the bank on the operations of the year 1895 will be cited:

"The liabilities of the bank, payable on demand, December 31, 1895, comprise:

	Francs.
"Bank notes in circulation	476, 502, 020. 00
Creditors' balance of current accounts	72, 103, 788. 68
Total	548, 605, 808. 68"

"The available assets comprise:

	Francs.
"The public funds of the bank and of the reserve	74, 989, 186. 61
Specie	101, 061, 507. 59
Notes due and debtors' balance of current accounts	45, 375, 264. 46
Notes current	365, 263, 291. 33
Loans on public funds	21, 973, 000. 00
Total	608, 662, 249. 99"

(22) Actual currency of the country: The monetary circulation is regulated in Belgium by the Latin Convention. It is the régime of bimetallism, restricted, however, by the suspension of the coinage of silver 5-francs pieces. The national bank is authorized to issue notes payable on sight.

(23) No; gold is not at a premium as compared with the actual currency of the country.

(24) The official Journal of the Bourse gives daily the average exchange on London. It has been necessary to examine all the rates of exchange during the year 1895 in order to arrive at the following results: On London, from 25, 21½ francs to 25, 25½ francs; on sight, from 25, 23½ francs to 25, 27½ francs. That is to say, an average of 25, 23½ francs on London and of 25, 25½ francs on sight.

(25) The Bureau du Change was reopened by Royal decree on the 29th day of January, 1895. This decree is hereto appended.

Nickel.—A series of laws and decrees was adopted in 1894 and in 1895, with the object of relieving Belgium from the circulation of foreign copper small change, of replacing the latter with national nickel pieces of small denomination, and of preventing in the future a new influx of the same foreign change. Copies of these laws and decrees are hereto appended.

The quantity of nickel coined is given in the table of the coinage of national specie. (See answers to questions 1 and 2.)

(26) No report is published on the operations of the mint, which have become of little importance since the suspension of the coinage of silver.

MONOMETALLISM IN EUROPE.

[Translated. From the pen of Mr. Allard, honorable director of the mint of Belgium, addressed to the United States minister at Brussels August 12, 1896.]

(1) The law of Belgium gives to every debtor the unquestioned right to pay at his option, in gold or silver, whether this debtor be the bank, the Government, or a private citizen, native or foreign.

(2) No official estimate exists of the quantity of money actually in circulation in Belgium, but this much can be affirmed that practically no gold is met with; so that the national bank, which alone issues bank notes in Belgium, never pays gold when these notes are presented, but always pays silver.

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(3) At its birth (in 1831) Belgium adopted the French monetary system, based on the two metals, gold and silver—i. e., bimetallism. But about 1851, when the gold mines of California and Australia produced gold in large quantities, Belgium demonetized gold and became silver monometallic. About 1865, however, business became so depressed in Belgium that the people forced the minister, M. Frere-Orban, to retire, and obliged the Government to become again bimetallic. About 1873 France prevailed upon the Latin States—France, Italy, Belgium, Switzerland—to suspend the coinage of silver, which suspension established here a kind of limping monometallism, for, though silver can no longer be coined, the then existing silver coins continue to circulate within the Latin Union, which Union dates from 1865. Since 1873 a crisis, consisting in a fall in all prices, exists continually, nor does it appear possible to arrest its progress. This fall in prices reacting on wages is now evolving a social and industrial crisis.

You ask me why we returned, in 1873, to monometallism, limping though it be? I can conceive no other reason, unless that it was to please a certain class of financiers which profited thereby—a class supported by theories, invented and defended at that time by some political economists, notably by members of the Institute of France.

(4) You ask what influence these monetary measures have had in Belgium on industry and wages. Money, which was already scarce in 1873, has become still scarcer, and that fall in prices which was predicted has taken place. The average fall in the price of all the products of labor is 50 per cent since 1873; that of cereals over 65 per cent. Industry is no longer remunerative, agriculture is ruined, and everybody is clamoring for protection by import duties, while our ruined citizens think of wars—such is the sad condition of Europe.

(5) For the last twenty years no new gold nor silver has been coined in Belgium.

(6) The mint pays for gold 3,437 francs per kilo and for silver 220.55 francs per kilo without any change since 1865; but since 1874 it no longer buys silver. There is thus a mint price for gold only; but gold is always dearer in the open market than the purchase price of the mint.

COINAGE OF GOLD AND SILVER IN BELGIUM FROM 1832 TO 1895.

GOLD PIECES.

Years.	10 francs.	25 francs.	20 francs.	Total.
	Francs.	*Francs.*	*Francs.*	*Francs.*
1832–1847				
1848		8,037,425		8,037,425
1849	371,880	3,749,575		4,121,455
1850	633,270	1,853,875		2,487,145
1851–1864				
1865			20,522,060	20,522,060
1866			10,639,260	10,639,260
1867			26,826,140	26,826,140
1868			27,634,980	27,634,980
1869			24,689,480	24,689,480
1870			63,824,060	62,824,060
1871			45,179,440	45,179,440
1872–73				
1874			60,927,000	60,927,000
1875			82,685,060	82,685,060
1876			41,393,640	41,393,640
1877			118,121,400	118,121,400
1878			51,108,000	51,108,000
1879–1881				
1882			10,446,200	10,446,200
1883–1895				
Total	1,005,150	13,640,875	583,996,720	598,642,745

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COINAGE OF GOLD AND SILVER IN BELGIUM FROM 1832 TO 1895—Continued.

SILVER PIECES.

Years.	20 centimes.	Quarter franc.	Half franc.	1 franc.	2 francs	2½ francs.	5 francs.	Total.
	Francs.	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*
1832							186,760	186,760.00
1833			29,175.00	60,836			5,628,330	5,718,341.00
1834		188,047.00	789,023.50	481,551	552,712		1,749,880	3,761,213.50
1835		160,004.75	402,521.00	830,098	450,110		1,848,840	3,692,173.75
1836–37								
1838			275,183.50	525,362	600,610		26,015	1,427,170.50
1839								
1840			173,685.00	261,041	472,682			907,408.00
1841–42								
1843		2,000.00	182,000.00		1,469,000			1,653,000.00
1844		241,500.00	792,000.00	2,196,400	966,000		401,000	4,596,900.00
1845–46								
1847							3,498,005	3,498,005.00
1848						1,398,537.50	12,581,415	13,979,952.50
1849				40,662		5,007,115.00	34,610,475	39,658,252.00
1850		25,209.00	104,785.50	162,016		397,880.00	26,326,480	27,016,370.50
1851							18,539,610	18,539,610.00
1852	60,128.00						23,023,380	23,083,508.00
1853	393,010.80						12,132,990	12,526,000.80
1854–1857								
1858	173,050.40						90,510	263,560.40
1859–1864								
1865							4,536,800	4,536,800.00
1866			3,403,000.00	3,041,000	3,884,000			10,328,000.00
1867			507,000.00	6,652,000	7,578,000		18,465,720	33,202,720.00
1868			537,932.00	675,000	4,328,460		32,852,820	38,394,212.00
1869				1,393,608			63,287,710	64,681,318.00
1870							52,340,375	52,340,375.00
1871							23,917,170	23,917,170.00
1872							10,225,000	10,225,000.00
1873							111,704,795	111,704,795.00
1874							12,000,000	12,000,000.00
1875							14,904,705	14,904,705.00
1876							10,799.425	10,799,425.00
1877–1879								
1880				545,222	235,294			780,516.00
1881			100,000.00	119,484				219,484.00
1882–1885								
1886			2,500,000.00	2,276,000				4,776,000.00
1887				2,724,000	300,000			3,024,000.00
1888–1895								
Total	626,189.20	616,760.75	9,796,305.50	21,984,880	20,836,868	6,803,532.50	495,678,210	556,342,745.95

BRITISH GUIANA.

CONSULATE OF THE UNITED STATES,
Demerara, British Guiana, June 11, 1896.

SIR: I have the honor to inclose herewith a report showing the production of gold in the colony of British Guiana for the calendar year of 1895. The gold is not refined, so it is impossible to state its "fineness."

This report was called for by letter, dated April 27, from the Director of the Mint, received May 25.

I have, etc.,

ANDREW J. PATTERSON,
Consul.

Hon. W. W. ROCKHILL,
Assistant Secretary of State, Washington, D. C.

RETURN OF GOLD FOR CALENDAR YEAR 1895.

Month.	Weight.			Month.	Weight.		
	Ozs.	*Dwts.*	*Grs.*		*Ozs.*	*Dwts.*	*Grs.*
January	5,876	14	5	August	10,031	5	19
February	6,999	10	5	September	9,811	15	3
March	9,686	6	21	October	12,186	17	3
April	11,145	12	10	November	9,389	1	10
May	12,810	18	21	December	14,338	0	21
June	9,749	5	18				
July	10,910	6	5	Total	122,935	14	21

H. I. PERKINS, *Acting Commissioner.*

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BRITISH INDIA.

GOVERNMENT OF INDIA,
FINANCE AND COMMERCE DEPARTMENT,
Calcutta, February 3, 1896.

SIR: With advertence to the letter from this department No. 638 A, dated the 6th of February, 1895, I am directed to inclose a statement showing the amount of gold and silver coined and foreign and domestic coins received for recoinage at the Calcutta and Bombay mints during the calendar year 1895.

I have the honor to be, sir, your most obedient servant,

R. NATHAN,
Officiating Under Secretary to the Government of India.

The DIRECTOR OF THE MINT,
Washington, D. C.

AMOUNT OF GOLD AND SILVER COINED AND FOREIGN AND DOMESTIC COINS RECEIVED FOR RECOINAGE IN THE INDIAN MINTS DURING THE CALENDAR YEAR 1895, BY DENOMINATIONS AND VALUES.

Denomination.	Value of, coined.	Value of, received for recoinage (foreign and domestic).
GOLD.		
Mohurs	*Rupees.* Nil.	*Rupees.* Nil.
SILVER.		
Dollars	7,524,449	.....
Rupees	Nil.	.....
Half rupees	Nil.	1,022,900
Quarter rupees	Nil.	.....
Eighth rupees	1,014,573½	.....
Total	8,539,022½	1,022,900

GOVERNMENT OF INDIA,
FINANCE AND COMMERCE DEPARTMENT,
Calcutta, March 23, 1896.

SIR: In continuation of the letter from this department, No. 3920 A, dated the 15th of August, 1895, I am directed to forward two statements, one showing the weight of gold produced from the mines in India during the calendar year 1895, and the other showing the weight of gold imported into India from China during the same period.

As stated in this department letter No. 1311 A, dated the 19th of March, 1895, it may be taken that the gold imported from China is all uncoined.

The statement of the production of gold now furnished is provisional, and further information which is awaited from Mysore will be sent to you.

I have the honor to be, sir, your most obedient servant,

R. NATHAN,
Officiating Under Secretary to the Government of India.

The DIRECTOR OF THE MINT, *Washington, D. C.*

WEIGHT OF GOLD PRODUCED FROM MINES IN INDIA DURING THE CALENDAR YEAR 1895.

Where produced.	Weight of bar gold.
	Kilograms.
State of Mysore	7,763.371
Madras Presidency	43.016
Total	7,806.387

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WEIGHT OF GOLD BULLION AND COIN IMPORTED INTO INDIA FROM CHINA DURING THE CALENDAR YEAR 1895.

Whence exported.	Where imported.	Weight of gold.
		Kilograms.
China	India	1,390.419

GOVERNMENT OF INDIA,
FINANCE AND COMMERCE DEPARTMENT,
Simla, October 3, 1896.

SIR: In continuation of paragraph 2 of the letter from this department, No. 1303 A, dated the 23d of March, 1896, I am directed to state that the revised figures just received show that the quantity of standard gold produced from the mines in the State of Mysore during the calendar year 1895 was 7,600.316 kilograms.

I have the honor to be, sir, your most obedient servant,

E. A. GAMBLE,
Under Secretary to the Government of India.

The DIRECTOR OF THE MINT, *Washington, D. C.*

WHOLE RUPEES COINED AND ISSUED FROM THE INDIAN MINTS, FROM 1835 TO 1893.

[Expressed in United States money.]

	Coined in Calcutta.	Coined in Madras.	Coined in Bombay.	Total coined.
William IV	$51,675,018.76	$558,018.60	$25,443,612.20	$77,676,649.56
Victoria:				
1840, first issue	85,235,053.18	10,373,168.34	52,030,295.18	147,638,516.70
1840, second issue	188,794,868.74	26,076,806.51	148,248,240.60	363,119,915.85
1862	127,627,675.06	13,965,586.93	193,271,037.21	334,864,299.20
1874	7,112,053.17		13,504,507.71	20,616,560.88
1875	5,510,055.19		9,170,641.10	14,680,696.29
1876	5,684,998.76		13,713,158.83	19,398,157.59
1877	18,593,526.50		45,264,081.38	63,857,607.88
1878	15,470,017.39		30,282,312.75	45,752,330.14
1879	7,545,247.55		34,485,314.52	42,030,562.07
1880	8,716,029.79		25,478,250.09	34,194,279.88
1881	1,153,800.09		1,497,772.13	2,651,572.22
1882	7,148,269.90		26,715,390.59	33,863,660.49
1883	2,426,941.32		8,537,395.15	10,964,336.47
1884	5,514,700.29		17,454,220.21	22,968,920.50
1885	16,177,898.56		30,732,708.60	46,910,607.16
1886	5,152,944.13		19,491,076.68	24,644,020.81
1887	19,042,810.11		22,927,080.00	41,969,890.11
1888	3,584,961.60		29,937,840.00	33,522,801.60
1889	4,437,768.45		30,932,610.00	35,370,378.45
1890	11,720,221.45		44,006,730.00	55,726,951.45
1891	6,949,133.05		23,448,150.00	30,397,283.05
1892	15,373,990.34		34,201,140.00	49,575,130.34
1893	4,329,764.85		*a*32,964,783.00	37,294,547.85
Total	624,977,748.23	50,973,580.38	913,738,347.93	1,589,689,676.54

a Includes 590,000 rupees ($279,483) coined in 1892 for the Bikanir State.

CANADA.

GEOLOGICAL SURVEY OF CANADA,
February 27, 1896.

DEAR SIR: In further reply to your letter of February 5, I have much pleasure in sending you herewith a memorandum giving the total production of gold and silver in Canada for the calendar year 1895. You will observe that the figures given are not to be considered absolutely correct, though any changes necessary will probably be slight.

Yours, truly,

GEORGE M. DAWSON.

The DIRECTOR OF THE MINT, *Washington, D. C.*

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PRODUCTION OF THE PRECIOUS METALS IN CANADA DURING THE CALENDAR YEAR 1895.

Metals.	Ounces.	Value.
Gold		$1,910,921
Silver	1,775,683	1,158,633

These figures can be taken as very close to the actual figures, which will not, however, be available for sometime yet.

ELFRIC DREW INGALL.

OTTAWA, *February 26, 1896.*

GEOLOGICAL SURVEY OF CANADA, *May 2, 1896.*

DEAR SIR: In reply to your letter of the 28th ultimo, referring to the gold and silver production of Canada in 1895, I have much pleasure in furnishing you with the amounts as per the inclosed memorandum.

Thanking you for your kind offer of reciprocal assistance, yours, truly,

GEORGE M. DAWSON.

The DIRECTOR OF THE MINT, *Washington, D. C.*

PRODUCTION OF GOLD AND SILVER IN CANADA, 1895.

Province.	Gold.		Silver.	
	Ounces.	Value.	Ounces.	Value.
Nova Scotia	19,679	$406,764.93		
Quebec	62	1,281.54	81,753	$53,343.83
Ontario	3,015	62,320.05		
Northwest Territories and Yukon	7,257	150,002.19		
British Columbia	*a* 62,435	*a* 1,290,531.45	1,693,930	1,105,289.32
Total	92,448	1,910,900.16	1,775,683	1,158,633.15

a Final returns for British Columbia not all yet available, but the figures given are known to be very closely correct.

OTTAWA, *May 2, 1896.* ELFRIC DREW INGALL.

CHILE.

LEGATION OF THE UNITED STATES,
Santiago, May 9, 1896.

SIR: In accordance with the instruction of the Department of State of February 4, received here on March 15 last, I beg to inclose answers to interrogatories regarding the production of gold and silver, coinage, etc., of this country.

I regret that I have not been able to obtain more satisfactory information.

I also inclose translations of two important acts.

I am, sir, your obedient servant,

EDWARD H. STROBEL.

The DIRECTOR OF THE MINT, *Washington, D. C.*

Replies to interrogatories, 1895.

(1) Gold coinage:

	Pesos.
Doubloons (coins of 10 pesos)	7,881,440
Escudos (coins of 5 pesos)	15,010,075

Recoined:

	Pesos.
Pounds sterling	14,033,333.33

NOTE.—By the resumption act of February 11, 1895, the Chilean peso is of the same fineness (eleven-twelfths) as the English sovereign, and is worth 18 pence.

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(2) Silver coinage:

	Pesos.
Pesos (100 cents)	6,085,903
20-cent pieces	29,234

(3, 4, 5, and 6) There are no data as to the weight of fine gold or silver used in the industrial arts during the year.

(7) Imports, gold:

	Pesos.
Coin	26,000,000
Bullion	2,000

Exports, gold:

	Pesos.
Coin	6,765,000
Bullion	2,000,900

(8) Imports, silver:

	Pesos.
Coin (Peruvian)	1,671,000
Bullion (Bolivian)	2,026,035
Bullion (European)	1,035,272

Exports, silver:

	Pesos.
Coin (Peruvian)	709,300
Bullion	8,163,600

(9, 10, and 11) There was no United States gold or gold coin imported, or United States gold coin deposited at the mints and melted during the year.

(12) Gold produced from the mines of the country:

	Pesos.
2,118 kilograms fine, value	3,856,645.02

(13) Silver produced from the mines of the country:

	Pesos.
156,542 kilograms fine, coining value, 50 pesos per kilogram, 0.835 fineness	9,397,700

(14 and 15) There are no data regarding the output of gold and silver from refineries.

(16) Gold bullion in the mint, 821,785.13 pesos.

Gold coin in circulation:

	Pesos.
Doubloons (coins of 10 pesos), fineness 0.91666, gross weight 5.99103 grams, value	8,075,120
Escudos (coins of 5 pesos), fineness 0.91666, gross weight 2.99551 grams, value	15,010,075

(17) Silver bullion in the mint, 1,673,455.78 pesos.

Silver coin in circulation:

	Pesos.
Pesos, fineness 0.835, gross weight 20 grams, value	6,085,903.00
20-cent pieces, fineness 0.835, gross weight 4 grams, value	29,234.80
20-cent pieces, fineness 0.500, gross weight 5 grams, value	4,546,642.20
10-cent pieces, fineness 0.500, gross weight 2½ grams, value	885,339.90
5-cent pieces, fineness 0.500, gross weight 1¼ grams, value	707,979.50

(18) Amount of Government notes outstanding at the end of the year, 10,242,241.50 pesos.

(19) Amount of bank notes outstanding at the end of the year, 19,343,267.50 pesos.

(20) There were no uncovered Government notes, as the redemption in gold of all Government notes is provided for by the resumption act of February 11, 1895.

(21) There were no uncovered bank notes, as by the resumption act of February 11, 1895, banks were required to deposit with the Government securities as a guaranty for their entire circulation, and by act of May 28, 1895, the Government assumed the redemption of the bank notes in gold.

(22) Until the resumption act of February 11, 1895, went into force on June 1 last the currency of the country was inconvertible paper. After that date it was gold, with silver as a subsidiary coinage.

(23) Until June 1, 1895, before specie payment was resumed, there had been no gold in circulation in Chile for over twenty years. Since the resumption of specie payment there has been no premium on gold.

(24) From January 1 to May 31, 1895, the average rate of exchange for ninety-day sight drafts on London was $16\frac{7}{10}$d. From June 1 to December 31 it was $17\frac{13}{16}$d.

(25) Two important laws were passed in Chile in 1895—the resumption act of February 11, which restored the country to a gold basis, fixing the monetary unit of the gold peso of 18d., and another act of May 28, providing for the redemption of the bank notes. Translations of both these acts are herewith inclosed.

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(26) The report of the director of the mint is attached to the annual report of the minister of finance, but the report for 1895 will not appear until next August or September.

EDWARD H. STROBEL,
United States Minister.

SANTIAGO, *May 9, 1896.*

[Translation.]

RESUMPTION ACT OF FEBRUARY 11, 1895.

ARTICLE 1. On June 1, 1895, the State will pay its notes to those who request it in the coin established by this act. These notes shall be incinerated monthly.

ART. 2. From December 31, 1897, the paper money of State shall be paid on presentation at the office designated by the President of the Republic with the gold coin created by this act on the basis of the value of the peso of 25 grams of silver, nine-tenths fineness, and from that date the Government bills shall be demonetized.

On the same date the obligations of the State contracted prior to this date shall be liquidated, and for the purposes of liquidation the nominal value of such obligations shall be computed in the above-mentioned peso of 25 grams, nine-tenths fineness, and reduced to the coin established by this act with which the service of such obligations shall be continued.

The payment and liquidation referred to in the two previous paragraphs shall only take place in case the value of the silver peso of 25 grams and nine-tenths fineness shall on the date mentioned have a value greater than 18d., otherwise the provisions of articles 1 and 16 of this act shall apply.

ART. 3. The President of the Republic is authorized for a period of three years to coin up to 10,000,000 pesos in the silver coin provided for by this act and to buy the bullion necessary for this purpose.

ART. 4. All the proceeds of the sales of nitrate deposits shall be exclusively devoted to the acquisition and coinage of specie.

ART. 5. The President of the Republic is authorized to discount or negotiate abroad advances upon the unpaid portion of the purchase money of the nitrate deposits.

ART. 6. The banks shall guarantee the total value of their issue by deposits in the mint of gold, Government bills, Government bonds, municipal bonds guaranteed by the State, treasury notes, and the bonds of banks which are exclusively mortgage banks.

These securities shall be assessed monthly at the rate fixed by the President of the Republic, and the said guaranty shall be made as follows: Seventy per cent in the three months following the promulgation of this act, and the 30 per cent remaining in the six subsequent months at the rate of 5 per cent per month. An execution shall be issued in case of delay in the deposit of this guaranty.

In the case of the failure of a bank, the State shall realize the guaranty, which shall be regarded as a pledge, and shall pay the bills in their entirety through the public offices. The credit proceeding from the bank notes shall besides be regarded as a preferred claim above all others filed in the bankruptcy, except the costs and the fee of the liquidator.

ART. 7. The bank bills guaranteed in the form prescribed in the preceding article shall be received in Government offices in payment of taxes, balances, and all public dues until December 31, 1897.

The deposits of bank notes made in the Government offices as a result of pending suits, or any other legal proceeding, shall be regarded as a special deposit.

ART. 8. Until the period referred to in the preceding article, the total issue of bank notes is limited to 24,000,000 pesos, distributed in proportion to the paid-up capital of the banks.

ART. 9. The banks may use in their issue notes of 20, 50, 100, 500, and 1,000 pesos. After the lapse of a year from the promulgation of this law the present bills of less denomination shall not be accepted in the Government offices, nor may they be kept in circulation.

ART. 10. There shall be three classes of gold coin—of the denominations condor, doblon, and escudo, of eleven-twelfths fineness. The condor shall weigh 11.98207 grams, the doblon shall weigh 5.99103 grams, and the escudo shall weigh 2.99551 grams.

ART. 11. The deviation allowed in the gold coins shall be of 0.002 in the fineness, and in the weight 1 per 1,000 in the condor, and 2 per 1,000 in the doblon and the escudo.

ART. 12. The condor shall be worth 20 pesos, the doblon 10 pesos, and the escudo 5 pesos.

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ART. 13. There shall be four classes of silver coin—one of 100 cents, called the peso, and the others of 20 cents, 10 cents, and 5 cents, with a fineness of 0.835. The silver peso shall weigh 20 grams, the 20-cent piece 4 grams, the 10-cent piece 2 grams, and the 5-cent piece 1 gram.

ART. 14. The deviation allowed in the silver coins shall be 0.004 in the fineness, and in the weight 3 per 1,000 for the coins of 1 peso, 5 per 1,000 for the 20-cent piece, 7 per 1,000 for the 10-cent pieces, and 10 per 1,000 for the 5-cent pieces.

The deviation allowed in the weight of each coin shall be 60 milligrams per peso, 20 milligrams for the 20-cent pieces, 14 milligrams for the 10-cent pieces, and 10 milligrams for the 5-cent pieces.

ART. 15. On the gold coin there shall be stamped the national coat of arms, and on the reverse the bust of the Republic, emblems or mottoes, and the words "Republic of Chile," the value in letters, and the year of the coinage in figures.

On the silver coins there shall be stamped a condor, and on the reverse a laurel wreath, and within the wreath the value in letters. There shall likewise be stamped emblems or mottoes, the words "Republic of Chile," the value in letters, and the year of the coinage in figures.

The President of the Republic shall fix the model of the dies and the diameters of the gold and silver coins.

ART. 16. The monetary unit shall be the twentieth part of the condor, the tenth part of a doblon, and the fifth part of an escudo, which shall be called "peso," and shall be received in payment of all obligations except as provided by the act of September 10, 1892, and article 2 of this act.

ART. 17. No one is obliged to receive more than 50 pesos in silver coin. The mint will exchange for gold coin the silver pesos presented for that purpose. The Government offices will receive silver coin in payment of any amount whatsoever.

ART. 18. The Government will receive, collect, and recoin, without charge to the last holder, the coins which may have become defaced in whole or in part, or which may have lost their legal weight as the result of natural use. Coins purposely injured shall cease to be legal tender.

ART. 19. The expenses of coining gold coin are for account of the Government, and the purchase of silver bullion for the mint shall be made without discount for these expenses.

ART. 20. The pound sterling legally coined in England or Australia shall be legal tender in Chile, and the value shall be 33⅓ pesos.

ART. 21. The Government shall coin the gold bullion which it already has, or which it may acquire in the future, in accordance with the law.

ART. 22. The acts of November 26, 1892, and May 31, 1893, are hereby repealed. From this repeal are excepted articles 9 of the act of 1892, and 5, 6, and 8 of the act of 1893.

[Translation.]

ACT OF MAY 28, 1895.

ARTICLE 1. The President of the Republic is authorized for the period of one year to contract abroad loans not exceeding the sum total of £2,000,000.

ART. 2. The proceeds of these loans may only be devoted to the extinguishment by bids of the municipal debts which the Government has assumed, according to the act of December 22, 1891, and for the purpose expressed in the following article.

The payment of municipal bonds shall not be made at a rate higher than par, and the authorization conferred upon the President of the Republic to execute the same shall last three years.

ART. 3. From the beginning of the resumption of specie payment until December 31, 1897, the treasury shall pay on presentation the bank bills that have been totally guaranteed.

The banks shall redeem each month the bills paid by the treasury, by cashing their value in gold.

The banks may also issue in payment obligations of an equal value, with 3 per cent monthly for a sinking fund, and 3 per cent half-yearly interest. In this case the bills will not be returned to the banks, but shall be incinerated.

A part of the guaranty deposited in the Government offices corresponding to the incinerated bills shall be especially applied to the payment of these obligations, which shall likewise enjoy all the privileges established in article 6 of the act of February 11 of this year.

ART. 4. The total issue of bank bills shall, until December 31, 1897, be limited to the amount registered at the time of the promulgation of this act, and in proportion as the bank notes are incinerated in accordance with article 3, the issue of each bank shall be regarded as reduced by the amount corresponding to its incinerated bills.

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ART. 5. The amounts which the treasury receives from January 1, 1896, for the obligations referred to in paragraph 3, article 3, shall be devoted to the extraordinary sinking fund of the foreign debt.

ART. 6. The President of the Republic is authorized to expend during the present year up to 25,000 pesos for the salary of additional employees and other expenses demanded by the execution of this act and the act of February 11 last.

ART. 7. The office or offices to which the operation of resumption is intrusted shall give an account every two weeks of its progress, by specifying the amount of the Government and bank bills and treasury notes which have been exchanged for gold, and this statement shall be published.

CHINA.

LEGATION OF THE UNITED STATES,
Peking, April 28, 1896.

SIR: As directed by the honorable Secretary of State, under date of the 4th of February, I have the honor to answer the interrogatories in your printed form as follows:

Replies to interrogatories, 1895.

(1) No gold was coined or recoined during 1895.

(2) There were coined at the Canton mint in 1895:

Silver dollars of the value of 1 Mexican dollar each	$331,700
Subsidiary coins of 20-cent, 10-cent, and 5-cent pieces	7,543,600
Total	7,875,300

There is no other mint in actual operation in China.

(3, 4, 5, and 6) There are no statistics regarding the weight of fine gold and silver used in the industrial arts during the calendar year 1895.

(7) Import of gold: None recorded. Export of gold, £1,083,000. No statistics as to proportion of coin, bullion, and ore available.

(8) Import of silver haikwan taels, 36,685,000; the value of the haikwan tael being 80 cents United States currency at the average sight draft on New York for the year 1895.

(9, 10, and 11) No United States gold or gold coin was imported, and no United States gold coin was deposited at the mints and melted during the year.

(12, 13, 14, 15, 16 and 17) There are no statistics as to the gold and silver produced from the mines of the country or of the value of output of gold and silver from refineries of the country during 1895.

(18 and 20) There were no Government notes outstanding and no uncovered Government notes at the end of the year 1895.

(19 and 21) There are no statistics of the amount of bank notes outstanding or uncovered bank notes.

(22) The actual currency of the country is silver and gold, uncoined, by weight; silver coins of the value of Mexican dollars, 20-cent pieces, 10-cent pieces, 5-cent pieces; copper coins of several low denominations, and bank notes of private banks.

(23) There are no statistics as to whether gold is at a premium as compared with the actual currency of the country. Gold and silver are commodities and their fluctuations follow the markets abroad.

(24) At the average sight exchange on London for the year 1895 the haikwan tael was worth 3s. 3¼d.

(25) No laws were passed during the year affecting the coinage, issue, or legal-tender character of the metallic or paper currency.

(26) No report of the operations of the mint is published.

I am, sir, your obedient servant,

CHARLES DENBY.

The DIRECTOR OF THE MINT, *Washington, D. C.*

LEGATION OF THE UNITED STATES,
Peking, May 14, 1896.

SIR: On the 27th ultimo this legation forwarded you a report on the production and coinage of the precious metals, which was supplemented by an additional report on the 6th instant.

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I have now received a report on the subject from the inspector-general of customs which has been delayed in arrival, but which is more comprehensive than the reports above referred to, and I request you to substitute it for them, if not too late.

I am, sir, your obedient servant,

CHARLES DENBY, Jr.,
Chargé d'Affaires ad interim.

The DIRECTOR OF THE MINT, *Washington, D. C.*

Replies to interrogatories, 1895.

(1) No gold coined.
(2) Silver coined in China during 1895.

BY THE CANTON MINT.

Denomination.	Tael.	Mace.	Candareen.	Li.	Number.	Value (silver).
Kuping taels	0	7	2	0 = $1.00	331,750	$331,750.00
Do	0	3	6	0 = .50		
Do	0	1	4	4 = .20	29,055,900	5,811,180.00
Do	0	0	7	2 = .10	14,159,660	1,415,966.00
Do	0	0	3	6 = .05		
Total value (silver)						7,558,896.00
United States gold						3,952,358.00

BY THE WUCHANG MINT.

Kuping taels	0	7	2	0 = $1.00	(a)	b 500,000.00
Do	0	3	6	0 = .50	(a)	
Do	0	1	4	4 = .20	(a)	
Do	0	0	7	2 = .10	(a)	
Do	0	0	3	6 = .05	(a)	
Total value (silver)						$694,444.00
United States gold						363,108.00

a Not ascertainable. *b* Estimated taels.

(3 to 6) No statistics procurable.

(7) Gold—

	Value.	
	Haikuan taels.	United States gold.
Imported	304,774	$243,819
Exported	6,929,554	5,543,643

(8) Silver—

	Value.	
	Haikuan taels.	United States gold.
Imported	47,697,369	$38,157,895
Exported	11,011,742	8,809,393

(9 to 23) No statistics procurable.
(24) Average rate of exchange on London (sight) was 1 Haikuan tael (3s. 3½d.).
(25 and 26) None.

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COLOMBIA.

[Translation.]

REPUBLIC OF COLOMBIA,
TREASURY DEPARTMENT SECTION,
Bogota, July 3, 1896.

In reply to your note of June 30, I received the copy of the circular sent by the Treasury Department of the United States, in which they ask answers to 26 questions. This department can only answer questions Nos. 19, 21, 22, 24, and 25, and we do so:

(19) The amount of national-bank notes in circulation the 31st of December, 1895, was $30,983,806.70.

(21) The amount of unredeemed bills was the same.

(22) The present currency of the country is unredeemable paper.

(23) Gold has a premium over the present money. The average rate of premium during 1895 was 160 per cent.

(24) The average rate of exchange on London during 1895 was $13 to the pound sterling.

(25) Law 70 of 1894, ordering the liquidation of the National Bank and the amortization of the paper currency, was suspended until December 31, 1895, owing to the revolution of January of the same year, said law having been published in the Diario Official of December 5, 1894, No. 9646.

For the minister:

JULIO CORREDOR,
Subsecretary.

The MINISTER OF FOREIGN AFFAIRS.

CURRENCY LAW OF 1894.

The following communication to the Department of State from Minister Luther J. McKinney has reference to the fiscal affairs of Colombia:

LEGATION OF THE UNITED STATES,
Bogota, December 13, 1894.

SIR: Law 70 of 1894, passed by the Colombia Congress on the 21st of November last, in relation to the liquidation of the National Bank and the redemption of paper currency, is hereby inclosed, with a translation therof.

This law is a radical departure from the financial policy of the Colombian Government for several years past. No other money than paper has been recognized by the Government, and no contract will be made binding in either silver or gold. In other words, a contract made payable in either silver or gold could not be collected in the courts, but a judgment would be issued for the number of dollars mentioned in the contract only in paper. It will be seen by the present law that it is the purpose only at first to redeem the fractional currency in circulation, then, as fast as may be, to redeem the larger currency until they shall have reached a full silver basis. Law 88 of 1886 may need explanation. This law allowed the General Government to add 25 per cent to all duties collected in the custom-houses and apply this addition to the repairs of the public highways. Two-fifths of this is now to be applied to the redemption of paper currency. This 25 per cent additional customs duties has not been sufficient, as it has been used to keep the roads in good condition, and it is believed the diverting of any part of this fund from its original purpose will cause great dissatisfaction among the people.

Article 11, which refers to the free coinage of gold, it is believed will not cause any gold to be coined, first, because there is no gold in the country for the purpose, the gold produced in the country being almost wholly in the hands of English capitalists, and as fast as the mines produce it it is shipped to Europe for coinage; second, the Government mints have been neglected for many years, and the appliances for coining are not in such a condition as to make coinage profitable.

For some years the Government has had in the vaults of the National Bank $2,300,000 of silver, 0.835 fine, which has been held for the redemption of certain paper currency. The last Congress authorized the President of the Republic to use this silver for such purposes as he might think best for the interests of the Republic. Instead of applying this silver to the redemption of that amount of paper money, and thus at once putting this amount of silver in circulation, he has sold the silver in Panama at a premium of about $1.20, and is applying the money to the payment of the army and other public purposes.

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It is hoped that the present law may result in a better financial condition for the Republic, but the change will be necessarily slow, and will not be felt for some time to come.

* * * * * * *

LUTHER J. MCKINNEY,
Minister.

Hon. WALTER Q. GRESHAM,
Secretary of State, Washington, D. C.

[From Monthly Bulletin of the Bureau of the American Republics, February, 1895.]

The law of November 21, 1894 (printed copy and translation filed in Department of State) provides that the affairs of the National Bank shall be liquidated and the bank reduced to a section of the treasury department. The Government is to proceed immediately "to dictate the necessary arrangements" for the discounting of the 6,000,000 francs remaining free of the loan which the Panama Canal Company is to deliver to the Republic. "After the initial discount, the sum which remains free shall be employed in the purchase of silver bars, which shall be coined in Europe in 10 and 20 cent pieces at 0.835 fine, in accordance with the rules of the fiscal code touching this matter. As soon as the 10 and 20 cent pieces mentioned in the foregoing article shall have been received * * * they shall be exchanged at par for paper 10 and 20 cent pieces, which shall then be burned." The following amounts are "to be destined for the redemption" of the paper money:

1. Two-fifths of the 25 per cent of the additional importation dues granted to the departments by law 88 of 1886.
2. The net amount of the value of the bills held by the National Bank, which shall be immediately collected.
3. The profits which the Government may obtain in exchange for the privilege granted to organized banks, or banks which may be organized for the issue of bank notes, in accordance with article 16 of this law.
4. The amounts which, by any cause, may belong to the nation by reason of its contracts with the Panama Railroad and Canal companies.

It is provided that of the two-fifths of the custom-house dues previously mentioned one-half shall be used for the coinage "of fractional silver currency at 0.835 fine, in pieces of 10, 20, and 50 cents, until the sum of $5,000,000 has been completed, including in this sum the amount ordered to be coined by article 3 of this law." The other half is to be used "for the monthly burning of the paper money. As soon as the $5,000,000 are coined the said funds shall continue to be used for the redemption of the paper money."

The free coinage of gold in the national mints in pieces of 16 grams, 120 milligrams, 0.900 fine, is authorized, the said piece to be called the condor, which shall have a legal value of $10, as well as pieces of $5, called the half condors, of $2, called one-fifth of a condor, and of $1.

The Government reserves the right to allow private parties to coin in the mints silver bars produced in the country, in pieces of a value of $1, 0.900 fine, provided they fulfill the conditions prescribed by the fiscal code.

From the date of the sanction of the new law the exportation of fractional currency is prohibited. Private parties are also prohibited from introducing any other money except gold at 0.900 fine.

The power to issue bills, the new law declares, belongs exclusively to the nation, and the Government shall not be allowed to take away or transfer this right until paper money is on a par with silver.

The capital of a bank desiring to exercise this privilege must be not less than $250,000 in legal silver or gold money. No bills may be issued except for a sum of double the amount of metal in the safe. The privilege may not be granted for a longer period than seven years, but it may be renewed. The bank is subject to inspection and must pay annually to the national treasury 2 per cent of the amount of bills issued.

Aside from the cases mentioned in article 121 of the constitution, the issue of paper money is absolutely prohibited.

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DENMARK.

LEGATION OF THE UNITED STATES,
Copenhagen, April 10, 1896.

SIR: I have the honor to report that pursuant to instruction of the Secretary of State, dated the 4th of February, I immediately made application to the proper officials of the Danish Government for the financial information required by your 26 printed interrogatories, and have this day received through the minister of foreign affairs a memorandum made under the direction of the minister of finance, containing the answers to your said questions. I inclose the original memorandum marked A; I also inclose a printed report of the operations of the mint from the 1st of April, 1894, to the 31st of March, 1895, which was sent to me by the minister in answer to your interrogatory numbered 26.

I have the honor to be, sir, your obedient servant,

JOHN E. RISLEY.

The DIRECTOR OF THE MINT, *Washington, D. C.*

[Translation.]

Replies to interrogatories, 1895.

(1) There was no gold coined in 1895, nor any gold coin called in.

(2) The same in relation to silver and silver coin.

(3) The treasury department is not able to give any information in regard to the amount of fine gold used in the industrial arts during the calendar year 1895.

(7) The importation of gold in 1895 was: In coin, about 7,500,000 kroner; in bars, about 378 kilograms, valued at about 940,000 kroner; of ore, nothing; while the exportation was: In coin, about 2,000,000 kroner; in bars and ore, nothing.

(8) The importation and exportation of silver can not be stated, but has, however, been inconsiderable.

(9 to 11) There was no gold coin of the United States imported in 1895, either direct or indirect. Neither has such coin been delivered to or melted down at the Royal mint.

(12 to 15) There are neither gold nor silver mines in this country, nor any refineries.

(16) The country's gold cash at the end of 1895 can be stated as follows: Gold in bars, about 24,000,000 kroner; Scandinavian gold coin, about 24,000,000 kroner; foreign gold coin, about 13,500,000 kroner.

(17) The cash in silver at the end of 1895 can be stated at about 20,000,000 in Scandinavian silver coin, while the cash in silver in bars and foreign silver coin is very inconsiderable.

(18 and 20) There are no Government notes in Denmark.

(19 and 21) The aggregate amount of the circulating bank notes was on December 31, 1895, 87,000,000 kroner. Of this amount 17,000,000 kroner was uncovered.

(22 and 23) In relation hereto reference is made to the information given in communication of March 2, 1894: "The law of coinage of May 23, 1873, made gold the standard for the Danish coin system with use of silver and inferior metal as change money. The same law provides the privilege for everybody to demand the exchange of any with 10 kroner dividable amount of change money into gold. Octroi of July 4, 1818, for the National Bank provides that the National Bank shall be and remain the only institution in Denmark privileged to issue 'notes of demand' as currency. They bear the value of gold coin and are to be paid on demand with gold coin according to their face value. Everybody has the right to demand the payment of the notes in gold when presented to the bank. The National Bank is thus the only bank issuing notes, and all notes circulating in Denmark belong to it."

(24) The average course on London in 1895 was 18 kroner 16 ore.

(25) No law was passed in 1895 in regard to coinage.

(26) Annexed is a report of the coining and melting down of coin in kroner at the Royal mint during the period from April 1, 1894, to March 31, 1895, together with a synopsis of the coining and melting of krone coin during the period from April 1, 1873, to March 31, 1895.

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REPORT OF THE COINING AND MELTING OF KRONE COIN AT THE ROYAL MINT DURING THE PERIOD FROM APRIL 1, 1894, TO MARCH 31, 1895.

COINED.

Description.	Number of pieces.	Value.
		Krone.
25-ore pieces	672,385	168,096.25
10-ore pieces	1,521,471	152,147.10
5-ore pieces	594,620	29,731.00
2-ore pieces	2,485,772	49,715.44
1-ore pieces	4,982,461	49,824.61
Total	10,256,709	449,514.44

MELTED DOWN.

2-krone pieces	528	1,056.00
1-krone pieces	644	644.00
25-ore pieces	2,680	670.00
10-ore pieces	5,980	598.00
5-ore pieces	4,570	228.50
2-ore pieces	9,650	193.00
1-ore pieces	2,650	26.50
Total	26,702	3,416.00

SYNOPSIS OF COINING AND MELTING OF KRONE COIN DURING THE PERIOD FROM APRIL 1, 1873, TO MARCH 31, 1895.

COINED.

Description.	Number of pieces.	Value.
		Krone.
20-krone pieces	1,606,532	32,130,640.00
10-krone pieces	618,210	6,182,100.00
2-krone pieces	5,079,550	10,159,100.00
1-krone pieces	6,024,642	6,024,642.00
25-ore pieces	10,559,096	2,639,774.00
10-ore pieces	17,310,334	1,731,033.40
5 ore pieces	5,346,117	267,305.85
2-ore pieces	24,808,407	496,168.14
1-ore pieces	35,877,640	358,776.40
Total	107,230,528	59,989,539.79

MELTED DOWN.

20-krone pieces	145	2,900.00
10-krone pieces	232	2,320.00
2-krone pieces	29,983	59,966.00
1 krone pieces	4,804	4,804.00
25-ore pieces	1,340,340	335,085.00
10-ore pieces	37,102	3,710.20
5-ore pieces	37,185	1,859.25
2-ore pieces	74,090	1,481.80
1-ore pieces	23,077	230.77
Total	1,546,958	412,357.02

ECUADOR.

LEGATION OF THE UNITED STATES,
Quito, March 25, 1896.

SIR: In compliance with a communication from the Secretary of State, bearing date February 4, 1896, and received by me on March 9, inclosing 26 interrogatories, especially asking an early answer to Nos. 12, 13, 14, and 15, I have the honor to state in reply, that there can be given no definite and reliable information as to the production of gold and silver in this country.

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There is no mint in Ecuador. There are no silver mines in operation in the Republic, and only one gold mine, that of the Plaza de Oro, near Esmeraldas on the Pacific Coast. No reports are made to the Government, and those made to the stockholders of the Plaza de Oro in New York are not believed here to be reliable, as it is said that much of the reported product of that company has been purchased from negroes and Indians in Colombia and Ecuador, who obtained it by washing in "pans" and "rockers."

One reliable merchant here informed me (and exhibited his books) that he had purchased in the five years last past 124 packages of gold dust in bottles, each package of 100 ounces, all of which was sent to France. Two other purchasers inform me that their shipments of gold were about the same.

It is all purchased in small quantities, chiefly from Indians or from those who buy from Indians, and was by them "washed" out in Ecuador on the eastern range of the Andes, on the headwaters of the Marañon and Amazon rivers, or the rivers from southern Colombia flowing eastward into the Napo and Marañon.

There is no certain method of ascertaining the amount of gold exported or used in the arts and the manufacture of jewelry in the country, but I can not think the production of gold would exceed 30,000 ounces per year. There is no silver shipped from the capital or coined. The churches and the cathedrals in the last twenty-five years have been stripped of the silver ornaments and plates, exported chiefly to Europe.

There is no gold in circulation here. Ecuador has no gold coin. Bank notes are convertible into silver and constitute the bulk of the circulation. The sucre (silver) contains about 400 grains of pure silver.

Five dollars in American gold will purchase 10 sucres.

Regretting my inability to answer more accurately, I am, sir, your obedient servant,

JAMES D. TILLMAN.

The DIRECTOR OF THE MINT, *Washington, D. C.*

EGYPT.

UNITED STATES AGENCY AND CONSULATE-GENERAL,
Cairo, March 5, 1896.

SIR: In compliance with an instruction from the Department of State, I transmit herewith answers to certain interrogatories, requested by the Secretary of the Treasury, for the information of your Bureau.

I am, sir, your obedient servant, FREDERIC C. PENFIELD,
United States Agent and Consul-General, Egypt.

The DIRECTOR OF THE MINT, *Washington, D. C.*

Replies to interrogatories, 1895.

(1 and 2) There was no gold nor silver coined or recoined or withdrawn from circulation during 1895.

(3 to 6) The Egyptian Government can furnish no information as to the amount of gold and silver, new or old, used in the industrial arts during the calendar year 1895.

(7) The imports of gold were £E5,178,997; exports, £E2,512,523.

(8) Imports of silver were £E57,861; exports, £E86,489. It is not possible to give the proportions of coin and bullion for either gold or silver. Egypt produces neither gold or silver.

(9 and 10) There were no imports of gold or gold coin from the United States.

(11, 12, 13, 14, and 15) There was no United States gold coin deposited at the mints and melted; no gold and silver produced from the mines, and no output of gold or silver from refineries of the country during the year.

(16 and 17) There are no means at hand for estimating the approximate stock of gold coin and bullion in the country at the close of the calendar year 1895.

(18, 19, 20, and 21) There are no Government notes in Egypt, nor are there any bank notes.

(22) The actual currency of the country is gold, with a limited circulation of silver, nickel, and bronze. Government treasuries are bound to receive any quantities of silver, nickel, and bronze in payment of sums due to the State. In private transactions the limits are £E2 for silver coins and £E0.1 for nickel and bronze. Egypt has no paper currency.

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(23) Gold is not at a premium as compared with the actual currency of the country.
(24) The average rate of exchange on London during the year 1895 was £E0.975 for the pound sterling.
(25) No laws were passed during 1895 affecting the coinage, issue, or legal-tender character of the metallic or paper currency.
(26) There is no mint, consequently no report.

FRANCE.

ADMINISTRATION OF COINS AND MEDALS,
Paris, April 17, 1896.

I have the honor to address you herewith answers to the interrogatories relative to the coinage, etc., of the French Republic in the calendar year 1895, transmitted to me through the ambassador of the United States at Paris.

I take advantage of this opportunity to thank you for the detailed answers you were good enough to send me in response to my letter of the 11th of January last, and also for a copy of the Report of the Director of the Mint, 1895.

Allow me, Mr. Director, and dear colleague, to express to you my most sincere regards.

A. DE FOVILLE,
The Director of the Mint.

The DIRECTOR OF THE MINT, *Washington, D. C.*

Answers to interrogatories.

(1) Coinage of gold in 1895:

Description.	Number of pieces.	Value.
		Francs.
20-franc pieces	5,293,347	105,866,940
10-franc pieces	213,999	2,139,990
Total	5,507,346	108,006,930

The number of light 20-franc pieces remelted in 1895 was 67,157, of the nominal value of 1,343,140 francs. These were recoined and are included in the coinage of 20-franc pieces given above.

The number of light 10-franc pieces remelted in 1895 was 799,009, of the nominal value of 7,990,090 francs, but it was possible to recoin only 2,139,990 francs of these.

(2) Coinage of silver in 1895:

Description.	Number of pieces.	Value.
		Francs.
2-franc pieces	600,000	1,200,000
1 franc pieces	3,200,000	3,200,000
50-centime pieces	7,200,000	3,600,000
Total	11,000,000	8,000,000

(3 and 5) The value and fine weight of gold and silver employed in the industrial arts in 1895 may be estimated at 19,000 kilograms of fine gold and 189,000 kilograms of fine silver.

The weight of the objects of gold and silver controlled during the same year by the bureaus of guaranty of France was 8,155 kilograms of gold of the fineness of about 0.750, and 105,694 kilograms of silver of the fineness of 0.950 and 0.800.

(4 and 6) The administration has no information to enable it to answer the interrogatories in regard to the amount of new and old gold and silver used in the industrial arts during 1895.

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(7 and 8) The customs statistics of France make no special distinction between gold and platinum ores. The richness of the gold ores imported into France may be ascertained from the figures given of the production of gold in France (interrogatories Nos. 12 and 14), resulting entirely from the treatment of these ores.

The table below gives, according to the customs tables, the provisional data of the imports and exports in 1895 of gold and silver in coin or in bars, of gold and platinum ores, and of silver. (The final figures have not yet appeared.)

GOLD.

Description.	Imports.		Exports.	
	Weight.	Value.	Weight.	Value.
	Kilograms.	*Francs.*	*Kilograms.*	*Francs.*
Gold coin	53,855.1	172,336,320	70,055.3	224,176,960
Gold bars	23,249.9	80,677,153	5,822.4	20,203,728
Gold and platinum ores	7,100.0	210,870	.....	.....
Total	84,205.0	253,224,343	75,877.7	244,380,688

SILVER.

Silver coin	491,310.8	93,349,071	373,382.6	70,942,694
Silver bars	474,899.7	47,489,970	79,866.4	7,986,640
Silver ore	522,900.0	235,305	.....	.....
Total	1,489,110.5	141,074,346	453,249.0	88,929,334

(9 and 10) The mint has no information as to the import of gold from the United States in 1895.

(11) The mint melted down no gold coins of the United States in 1895.

(12, 13, 14, and 15) There were produced by the refineries of France, according to the declarations of these institutions in 1894 (the figures for 1895 have not yet appeared), 376 kilograms of gold of the value of 1,203,200 francs; 96,955 kilograms of silver of the commercial value of 10,665,050 francs. All the gold is obtained from foreign ores treated in France; as to silver, the French mines produced in 1894 a quantity of ore representing 26,168 kilograms of silver, representing a value of 2,878,000 francs This ore was treated in the country or exported.

(16 and 17) The stock of coined gold and silver at the end of the year 1895 may be estimated at about the same amount as in 1894, that is, at 4,000,000,000 of francs of gold, and at a little more than 2,000,000,000 francs of silver without, however, reaching 2,250,000,000 francs full legal tender (5-franc pieces), and at 3,000,000,000 francs fractional silver coins.

It is impossible to determine the amount of gold in the form of bars in the country. Even the Bank of France makes no distinction between coin and bars in its metallic stock.

(18 and 19) The amount of notes outstanding on January 30, 1896, was 3,681,021,075 francs.

(20 and 21) As the metallic stock of the bank at the same date was 3,173,057,202 francs, the uncovered circulation amounted to 507,963,873 francs.

NOTE.—On the 26th of December, 1895, when the last weekly report of the Bank of France was made, the amount of notes outstanding was 3,484,934,925 francs, and the metallic stock of the bank 3,202,919,875 francs. On January 2, 1896, the amount of notes outstanding was 3,647,097,410 francs, and the metallic stock 3,184,891,438 francs. The amount of uncovered notes at the former date, therefore, was 282,015,050 francs, and at the latter 452,205,972 francs.

(22) In France gold pieces and 5-franc silver pieces have full debt-paying power. The legal-tender power of divisional pieces is limited to 5 and 50 francs between individuals.

(23) The average premium on gold in bars was, during the month of—

	Per cent.
September, 1895	1.50
October, 1895	1.50
November, 1895	.50
December, 1895	.40

Gold was at par during the other eight months.

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(24) The rates of exchange on London (long bills) in 1895 were as follows:

Months.	Highest rate.	Lowest rate.	Months.	Highest rate.	Lowest rate.
	Francs.	*Francs.*		*Francs.*	*Francs.*
January	25.23	25.205	July	25.34	25.20
February	25.27	25.235	August	25.325	25.30
March	25.31	25.25	September	25.325	25.31
April	25.32	25.26	October	25.31	25.265
May	25.27	25.26	November	25.245	25.215
June	25.28	25.25	December	25.275	25.23

(25) The decree relating to the coins for French Indo-China is as follows:

The President of the French Republic, in accordance with the views of the monetary commission instituted by the decree of January 30, 1886, and on the report of the president of the council, the minister of finance, and of the minister of the colonies, decrees as follows:

ARTICLE 1. The French trade piaster and its subdivisions shall henceforth be manufactured subject to the following conditions as to fineness, weight, tolerance, and diameter:

Denominations.	Diameter.	Fineness.		Weight.	
		Legal.	Tolerance over and under.	Legal.	Tolerance above and below.
SILVER.	*Millimeters.*		*Thousandths.*	*Grams.*	*Millimeters.*
1 piaster	39	900	3 above and 2 below.	27	3
50/100 piaster	29			13.5	
20/100 piaster	26			5.4	5
10/100 piaster	19			2.7	7
BRONZE.					
1/100 piaster	27.5	Copper, 95; Tin, 4; Zinc, 1	Copper, 10; Tin, 5; Zinc, 5	7.5	10
1 sapec	20			2.0	15

ARTICLE 2. The president of the council, the minister of finance, and the minister of the colonies, are, each in his own sphere, charged with the execution of the present decree, which shall be inserted in the Official Journal, the Bulletin of Laws, and the Bulletin of the Colonies.

Done at Paris, July 8, 1895.

FELIX FAURE.

By the President of the Republic, the president of the council, the minister of finance:

A. RIBOT.

CHAUTEMPS, *Minister of the Colonies.*

(26) No document has appeared except the report of the commission of control of the monetary circulation, a copy of which has already been forwarded to the Director of the Mint at Washington.

DECREE FORBIDDING GUADELOUPE TO EXPORT BILLON COIN.

ARTICLE 1. The export of billon coin by Guadeloupe is hereby prohibited.

ART. 2. Every violation of the present decree shall be punished by a fine of from 50 to 100 francs, and by imprisonment from five to fifteen days.

The same penalties shall be inflicted on the captains of ships who shall knowingly take such coin on board.

ART. 3. The provisions of article 463 of the penal code shall be applicable to the violations of the present decree.

ART. 4. The minister of the colony is charged with the execution of the present decree.

Done at Paris, this 7th day of December, 1895.

FELIX FAURE.

By the President of the Republic.

GUIEYSSE, *Minister of the Colonies.*

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COINS MANUFACTURED IN 1895.

[From Bulletin de Statistique, January, 1896.]

I.—FRENCH COINS.

Denominations.	Number of pieces.	Nominal value.
		Francs.
Gold:		
20-franc pieces	5,293,347	105,866,940.00
10-franc pieces	213,999	2,139,990.00
Total	5,507,346	108,006,930.00
Silver:		
2-franc pieces	600,000	1,200,000.00
1-franc pieces	3,200,000	3,200,000.00
50-centime pieces	7,200,000	3,600,000.00
Total	11,000,000	8,000,000.00

II.—OTHER COINS.

INDO-CHINA.

		Francs.
Silver, old type: *a*		
1-piaster pieces	1,782,012	9,699,491.31
½-piaster pieces	100,000	272,150.00
¼-piaster pieces	300,000	326,580.00
⅒-piaster pieces	600,000	326,580.00
Total	2,782,012	10,624,801.31
Silver, new type: *b*		
1-piaster pieces	3,798,452	20,511,640.80
½-piaster pieces	250,000	270,000.00
⅒-piaster pieces	300,000	162,000.00
Total	4,348,452	20,943,640.80

TUNIS.

		Francs.
Gold:		
20-franc pieces	20	400.00
10-franc pieces	80	800.00
Total	100	1,200.00
Silver:		
2-franc pieces	300	600.00
1-franc pieces	700	700.00
50-centime pieces	1,000	500.00
Total	2,000	1,800.00
General total	2,100	3,000.00

MONACO.

		Francs.
Gold:		
100-franc pieces	20,000	2,000,000.00

CHILE.

		Francs.
Gold:		
1-doubloon pieces *c*	27	510.73
Silver:		
20-centavo pieces	50	40.00
10-centavo pieces	50	20.00
5-centavo pieces	50	10.00
Total	150	70.00
General total	177	580.73

a Piasters of 27.215 grams and proportional weight for the divisional coins (fineness, 0.960).
b Piasters of 27 grams and proportional weight for the divisional coins (decree of July 8, 1895).
c Trial pieces.

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COINS MANUFACTURED IN 1895—Continued.

II.—OTHER COINS—continued.

GUATEMALA.

Denominations.	Number of pieces.	Nominal value.
Gold:		*Francs.*
10-piaster pieces (10 pesos) *a*	10	500.00
5-piaster pieces (5 pesos) *a*	10	250.00
Total	20	750.00

HAITI.

Silver:		*Francs.*
1-gourd pieces	100,000	500,000.00
½-gourd pieces	903,922	2,097,099.04
¼-gourd pieces	1,276,088	1,186,761.84
Total	2,280,010	3,783,860.88

MOROCCO.

Silver:		*Francs.*
5-ounce pieces	166,559	449,709.30
2½-ounce pieces	343,236	463,368.60
1-ounce pieces	850,511	459,275.94
½-ounce pieces	1,722,627	465,109.29
Total	3,082,933	1,837,463.13

a Trial pieces.

RECAPITULATION OF THE MONETARY MANUFACTURE OF 1895.

Nationalities.	Number of pieces.	Value.
		Francs.
French coins	16,507,346	116,006,930.00
Indo-China	7,130,464	31,568,442.11
Tunis	2,100	3,000.00
Monaco	20,000	2,000,000.00
Other coins:		
Chile	177	580.73
Guatemala	20	750.00
Haiti	2,280,010	3,783,860.88
Morocco	3,082,933	1,837,463.13
Total	29,023,050	155,201,026.85

COINS MANUFACTURED FROM 1880 TO 1895.

Beginning with the 1st of January, 1880, when the French system of farming out the coinage was supplanted by coinage by the Government, in accordance with the law of July 31, 1879, the mints of the Provinces having been closed, the annual coinages of the years 1880–1895 were made at the Paris mint exclusively.

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The following tables exhibit these coinages by countries and by metals:

A.—FRENCH COINS.

Year.	Gold.		Silver.	
	Number of pieces.	Nominal value.	Number of pieces.	Nominal value.
		Francs.		*Francs.*
1880				
1881	21,670	2,167,000	8,414,890	6,733,445.00
1882	37,420	3,742,000	2,319,719	1,159,859.50
1883				
1884				
1885	2,894	289,400		
1886	1,023,767	23,586,700	308,758	154,379.00
1887	1,232,022	24,668,190	7,500,527	8,910,583.00
1888	27,707	554,140	7,891,676	5,763,624.00
1889	873,390	17,477,800	400	370.00
1890	1,030,140	20,602,800		
1891	871,101	17,422,020		
1892	225,706	4,514,120		
1893	2,547,168	50,943,360		
1894	490,981	9,831,060	5,500,000	4,000,000.00
1895	5,507,346	108,006,930	11,000,000	8,000,000.00
Total	13,891,312	283,805,520	42,935,970	34,722,260.50

Year.	Bronze.		General total.	
	Number of pieces.	Nominal value.	Number of pieces.	Nominal value.
		Francs.		*Francs.*
1880	2,586,143	200,000	2,586,143	200,000.00
1881	3,251,000	200,000	11,687,560	9,100,445.00
1882	3,409,500	200,000	5,766,639	5,101,859.50
1883	3,600,000	200,000	3,600,000	200,000.00
1884	3,440,000	200,000	3,440,000	200,000.00
1885	3,600,000	200,000	3,602,894	489,400.00
1886	3,440,000	200,000	4,772,525	23,941,079.00
1887	2,581,956	147,803	11,314,505	33,726,576.00
1888	3,510,000	200,000	11,429,383	6,517,764.00
1889	3,670,000	200,000	4,543,790	17,678,170.00
1890	3,440,000	200,000	4,470,140	20,802,800.00
1891	4,300,000	200,000	5,171,101	17,622,020.00
1892	3,920,000	200,000	4,145,706	4,714,120.00
1893	3,270,000	200,000	5,817,168	51,143,360.00
1894	3,690,000	200,000	9,680,981	14,031,060.00
1895	4,600,000	110,000	21,107,346	116,116,930.00
Total	56,308,599	3,057,803	113,135,881	321,585,583.50

B.—COINS OF FRENCH COLONIES AND COUNTRIES OF THE PROTECTORATE.

Year.	Gold. *a*		Silver. *b*	
	Number of pieces.	Nominal value.	Number of pieces.	Nominal value.
		Francs.		*Francs.*
1880				
1881				
1882				
1883				
1884			840,000	653,160.00
1885			4,159,511	6,964,378.37
1886			3,215,771	17,503,441.55
1887			3,326,410	17,017,049.63
1888			1,947,615	5,702,168.45
1889			1,240,184	6,749,124.05
1890	51,101	772,515	8,158	43,495.84
1891	920,000	13,800,000	3,640,000	3,500,000.00
1892	837,321	16,745,620	2,409,146	2,767,672.00
1893	34,756	694,320	1,596,723	4,871,777.28
1894	100	1,200	2,160,437	7,940,072.59
1895	100	1,200	7,132,464	31,570,242.11
Total	1,843,378	32,014,855	31,676,419	105,282,581.87

a The gold coins which figure in this table are of the Regency of Tunis.
b The silver coins are coins of Tunis, Indo-China, and of the Grand Comoro.

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B.—COINS OF FRENCH COLONIES AND COUNTRIES OF THE PROTECTORATE—Cont'd.

Year.	Bronze. *a*		General total.	
	Number of pieces.	Nominal value.	Number of pieces.	Nominal value.
		Francs.		*Francs.*
1880				
1881				
1882				
1883				
1884	444,269	24,181.56	1,284,269	677,341.56
1885	3,673,190	199,931.73	7,832,701	7,164,310.10
1886	1,882,541	102,466.70	5,098,312	17,605,908.25
1887	7,362,388	183,014.78	10,688,798	17,200,064.41
1888	7,564,148	193,996.59	9,511,763	5,896,165.04
1889	1,573,464	85,643.64	2,813,648	6,834,767.69
1890	150,400	10 030.00	209,659	826,040.84
1891	8,400,000	500,000.00	12,960,000	17,800,000.00
1892	6,849,584	358,946.03	10,096,051	19,872,238.03
1893	3,750,416	163,202.97	5,381,895	5,729,300.25
1894	2,965,000	52,524.95	5,125,537	7,993,797.54
1895	289,747	15,770.93	7,422,311	31,587,213.04
Total	44,905,147	1,889,709.88	78,424,944	139,187,146.75

a The bronze coins are coins of Tunis, Indo-China, and of the Grand Comoro.

C.—FOREIGN COINS.

Year.	Gold. *a*		Silver. *b*	
	Number of pieces.	Nominal value.	Number of pieces.	Nominal value.
		Francs.		*Francs.*
1880				
1881			3,688,589	4,846,472.50
1882	5,000	500,000.00	5,320,118	9,312,847.50
1883			23,546,292	10,116,312.25
1884	556,469	11,646,900.00	2,253,461	5,167,305.00
1885	8,531	853,100.00		
1886	15,000	1,500,000.00	1,500,000	750,000.00
1887			1,850,000	2,500,000.00
1888				
1889				
1890			1,850,000	1,500,000.00
1891	20,000	2,000,000.00	4,362,721	6,743,094.73
1892			5,535,224	4,854,835.52
1893			6,145,313	3,890,043.10
1894			13,660,502	9,579,731.00
1895	20,047	2,001,260.73	5,363,093	5,621,394.01
Total	625,047	18,501,260.73	75,075,313	64,882,035.61

Year.	Bronze or nickel. *c*		General total.	
	Number of pieces.	Nominal value.	Number of pieces.	Nominal value.
		Francs.		*Francs.*
1880				
1881			3,688,589	4,846,472.50
1882	28,740,452	2,160,965.80	34,065,570	11,973,813.30
1883	5,088,311	927,545.85	28,634,603	11,043,858.10
1884	715,619	261,092.50	3,525,549	17,075,297.50
1885			8,531	853,100.00
1886	3,750,000	250,000.00	5,265,000	2,500,000.00
1887			1,850,000	2,500,000.00
1888	1,450,000	150,000.00	1,450,000	150,000.00
1889				
1890			1,850,000	1,500,000.00
1891	7,610,391	696,300.30	11,993,112	9,439,395.03
1892	6,426,379	354,207.25	11,961 603	5,209,042.77
1893	248,008	49,601.60	6,393,321	3,939,644.70
1894	17,577,057	1,929,151.65	31,237,559	11,508,882.65
1895	20,424,935	2,771,246.75	25,808,075	10,393,901.49
Total	92,031,152	9,550,111.70	167,731,512	92,933,408.04

a The gold coins were coined for Greece and the Principality of Monaco.
b The silver coins were coined for Greece, Switzerland, Chile, Ethiopia, Guatemala, Haiti, Morocco, and Venezuela.
c The bronze coins were coined for Greece, Bolivia, Haiti, Portugal, and Santo Domingo, and the nickel coins for Greece, Bolivia, and Santo Domingo.

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RECAPITULATION OF COINS MANUFACTURED IN THE YEARS 1880 TO 1895.

Year.	France.		French colonies and countries of the protectorate.	
	Number of pieces.	Nominal value.	Number of pieces.	Nominal value.
		Francs.		*Francs.*
1880	2,586,143	200,000.00		
1881	11,687,560	9,100,445.00		
1882	5,766,639	5,101,859.50		
1883	3,600,000	200,000.00		
1884	3,440,000	200,000.00	1,284,269	677,341.56
1885	3,602,894	469,400.00	7,832,701	7,164,310.10
1886	4,772,525	23,941,079.00	5,098,312	17,605,908.25
1887	11,314,505	33,726,576.00	10,688,798	17,200,064.41
1888	11,429,383	6,517,764.00	9,511,763	5,896,165.04
1889	4,543,790	17,678,170.00	2,813,648	6,834,767.69
1890	4,470,140	20,802,800.00	209,659	826,040.84
1891	5,171,101	17,622,020.00	12,960,000	17,800,000.00
1892	4,145,706	4,714,120.00	10,096,051	19,872,238.03
1893	5,817,168	51,143,360.00	5,381,895	5,729,300.25
1894	9,680,981	14,031,060.00	5,125,537	7,993,797.54
1895 *a*	21,107,346	116,116,930.00	7,422,311	31,587,213.04
Total	113,135,881	321,565,583.50	78,424,944	139,187,146.75

Year.	Foreign countries.		Total.	
	Number of pieces.	Nominal value.	Number of pieces.	Nominal value.
		Francs.		*Francs.*
1880			2,586,143	200,000.00
1881	3,688,589	4,846,472.50	15,376,149	13,946,917.50
1882	34,065,570	11,973,813.30	39,832,209	17,075,672.80
1883	28,634,603	11,043,858.10	32,234,603	11,243,858.10
1884	3,525,549	17,075,297.50	8,249,818	17,952,639.06
1885	8,531	853,100.00	11,444,126	8,506,810.10
1886	5,265,000	2,500,000.00	15,135,837	44,046,987.25
1887	1,850,000	2,500,000.00	23,853,303	53,426,640.41
1888	1,450,000	150,000.00	22,391,146	12,563,929.04
1889			7,357,438	24,512,937.69
1890	1,850,000	1,500,000.00	6,529,799	23,128,840.84
1891	11,993,112	9,439,395.03	30,124,213	44,861,415.03
1892	11,961,603	5,209,042.77	26,203,360	29,795,400.80
1893	6,393,321	3,939,644.70	17,592,384	60,812,304.95
1894	31,237,559	11,508,882.65	46,044,077	33,533,740.19
1895 *a*	25,808,075	10,393,901.49	54,337,732	158,098,044.53
Total	167,731,512	92,933,408.04	359,292,337	553,706,138.29

a It will be seen that the total number of pieces manufactured and especially their value is much higher for 1895 than for previous years.

BANK OF FRANCE.

MONTHLY VARIATIONS OF THE METALLIC RESERVE, PARIS AND BRANCHES, 1895.

[From Bulletin de Statistique, January, 1896, page 106.]

Year and month.	Gold.		Silver.	
	Maximum.	Minimum.	Maximum.	Minimum.
1895.	*Francs.*	*Francs.*	*Francs.*	*Francs.*
January	2,108,900	2,060,800	1,241,900	1,232,200
February	2,152,100	2,107,400	1,238,800	1,234,300
March	2,150,900	2,125,000	1,243,500	1,238,600
April	2,117,000	2,066,000	1,243,000	1,231,900
May	2,066,200	2,052,400	1,247,900	1,234,000
June	2,054,600	2,044,500	1,257,800	1,248,900
July	2,050,900	2,034,400	1,259,500	1,255,600
August	2,054,300	2,046,800	1,262,000	1,258,300
September	2,055,900	2,021,300	1,261,100	1,249,500
October	2,023,500	1,964,300	1,251,000	1,233,400
November	1,966,500	1,946,200	1,234,500	1,230,000
December	1,964,200	1,954,600	1,239,900	1,233,300

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SITUATION OF THE PRINCIPAL BANKS OF ISSUE ON DECEMBER 31, 1895.

[From Bulletin de Statistique, January, 1896, page 126.]

Banks.	Metallic reserve.	Analysis of the reserve.		Bills payable to bearer in circulation.
		Gold.	Silver.	
	Francs.	*Francs.*	*Francs.*	*Francs.*
Imperial Bank of Germany	1,066,400,000			1,650,100,000
Bank of Austria-Hungary	778,500,000	512,600,000	265,900,000	1,301,800,000
Bank of Belgium	99,900,000			449,400,000
National Bank of Bulgaria[1]	4,600,000			2,300,000
National Bank of Denmark	97,900,000	97,900,000		121,900,000
Bank of Spain	456,500,000	200,100,000	256,400,000	989,500,000
Bank of Finland[2]	24,700,000	21,700,000	3,000,000	57,500,000
Bank of France	3,202,900,000	1,963,000,000	1,239,900,000	3,484,900,000
National Bank of Greece[2]	1,900,000			113,000,000
Italy:				
Bank of Italy[3]	352,500,000	299,300,000	53,200,000	758,300,000
Bank of Naples[3]	116,000,000	105,600,000	10,400,000	242,300,000
Bank of Sicily[3]	36,700,000	35,200,000	1,500,000	52,200,000
Bank of Norway[2]	37,000,000			71,100,000
Bank of the Netherlands	265,900,000	93,200,000	172,700,000	432,800,000
Bank of Portugal	68,300,000	26,700,000	41,600,000	311,000,000
Bank of Roumania	63,700,000	61,000,000	2,700,000	131,900,000
United Kingdom:				
Bank of England	1,090,000,000	1,090,000,000		657,500,000
Banks of Scotland[4]	138,000,000	123,000,000	15,000,000	176,000,000
Banks of Ireland[4]	82,200,000	72,100,000	10,100,000	147,700,000
Imperial Bank of Russia	1,940,000,000	1,920,000,000	20,000,000	4,324,200,000
Bank of Servia	10,900,000	6,200,000	4,700,000	24,600,000
Sweden:				
Royal Bank[5]	37,400,000	34,000,000	3,400,000	76,200,000
Private banks[5]	26,300,000	10,500,000	15,800,000	84,800,000
Swiss banks of issue	95,000,000	83,400,000	11,600,000	190,000,000
Ottoman Bank (Turkey)[6]	48,900,000			24,700,000
Associated banks of New York	335,500,000			70,000,000

[1] Situation on October 15.
[2] Situation on November 30.
[3] Situation on December 29.
[4] Situation on October 5.
[5] Situation on October 31.
[6] Situation on July 31.

THE BANK OF FRANCE, 1895.

[From the Economist, London, March 7, 1896, page 299.]

The operations of the bank increased during the year 1895 from different causes, among those specially mentioned being the Chinese loan and the financial crisis due to the speculation in gold shares, when the discounts rose from 390,000,000 francs ($75,270,000) to 850,000,000 ($165,050,000), and the advances on securities from 295,000,000 ($56,935,000) to 386,000,000 ($74,498,000). The liquidation of the affairs of the Société des Dépôts et Comptes Courants was terminated during the year. Of the sum of 48,443,000 francs ($9,349,499) advanced by the Bank of France on the intervention of the Government when the Société des Dépôts suspended payments in 1891, 15,966,000 francs ($3,081,438) was outstanding at the commencement of 1894, and 7,509,000 francs ($1,449,237) in January, 1895. The entire sum, capital and interest, has been since recovered by the realization of the securities taken over without any call on the financial establishments which gave their guaranty. The question of the renewal of the bank privilege, which expires at the end of 1897, was the subject of several interviews with the minister of finance in the last cabinet, but since the month of October the negotiations have been suspended. The total business of the year, Paris and branches, on which a profit was earned, amounted to 13,071,183.400 francs ($2,522,738,396.20), an increase of 706,810,300 francs ($136,414,387.90) on 1894. The chapters showing an augmentation were the advances on securities, which increased 421,614,100 francs ($81,371,521.30); bills to order and drafts between Paris and the branches, 244,607,800 francs ($47,209,305.40); bullion operations, 99,036,600 francs ($19,114,063.80); negotiations of coupons and public securities, 97,881,500 francs ($18,891,129.50). The chapters in which there was a diminution were discounts, 103,092,900 francs ($19,896,929.70); collection of bills, 22,694,000 francs ($4,379,942); and advances on bullion, 30,542,800 francs ($5,894,760.40).

In addition to the profit-earning business, the bank effected book transfers for a sum of 103,222,000,000 francs ($19,921,846,000) and gratuitous operations for the treasury to the amount of 6,201,960,300 francs ($1,196,978,337.90). Compared with the previous year, there was an increase of 12,922,000,000 ($2,493,946,000) in the former kind of operations, and a decrease of 1,131,250,000 francs ($218,331,250) in the latter. The maximum specie reserve was 3,391,800,000 francs ($654,617,400), on March 2, and the

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minimum 3,177,000,000 francs ($613,161,000) on November 11. If the cash on December 31 last is compared with that on the same date of 1894, it will be found that the gold fell from 2,060,800,000 francs ($397,734,400) to 1,950,300,000 francs ($376,407,900), and the silver from 1,238,000,000 francs ($238,934,000) to 1,234,600,000 francs ($238,277,800). Remarking on the situation of the reserve of gold, the report states that down to the end of February the gold at the bank continued to increase.

The large purchases of gold shares in London then caused the exchange to rise above par and the stock of gold to diminish. By a timely opening of the reserves of that metal the exchange never rose above 25.29½ francs ($4.881935), notwithstanding the large payments that had to be made in England. Proof was thus afforded of the utility of constituting a large stock during periods of calm, as but for the considerable reserves it would have been necessary to adopt measures that would have reacted on the trade and industry of the country. With regard to the silver at the bank, the amount remains stationary, showing that there is no excess of that metal in circulation. The limit of the note issue has remained unchanged at 4,000,000,000 francs ($772,000,000) since 1893. The real circulation moved between a maximum of 3,749,000,000 francs ($723,557,000) on January 20, and a minimum of 3,325,000,000 francs ($641,725,000) on August 26. At the date of the meeting, the note circulation amounted to 3,681,000,000 francs ($710,433,000), a decrease of 68,000,000 francs ($13,124,000) on the year, almost exclusively in the notes of 50 francs ($9.65) and under. Nearly a half of the circulation, or 1,764,000,000 francs ($340,452,000), consisted of notes of 100 francs ($19.30). Those of 1,000 francs ($193) represented a sum of 1,302,000,000 francs ($251,286,000); of 50 francs ($9.65), 344,000,000 francs ($66,392,000), and of 500 francs ($96.50), 266,000,000 francs ($51,338,000).

The five notes of 5,000 francs ($965) which have appeared regularly in the accounts for more than twenty years are still outstanding, and 715,315 francs ($138,055.80) of the notes of 5 francs issued to remedy the scarcity of small coin during the war still remain in the circulation. The rate of discount was reduced to 2 per cent in March, after standing at 2½ per cent for three years, and has since remained unchanged. The average life of bills discounted in Paris rose on the year from under twenty-three days to twenty-four, but on the branches declined from twenty-six and one-eighth days to twenty-five. The average amount of the bills also rose in Paris from 710 francs ($137.03) to 742 francs ($143.21), but fell in the branches from 598 francs ($115.41) to 573 francs ($110.59). In Paris, of a total of 5,592,606 francs ($1,079,372.96) bills discounted, 1,866,554 francs ($360,244.92), or more than a third were for sums of 100 francs ($19.30) and under. The account of overdue bills in Paris fell on balance on the year from 757,321 francs ($146,162.95) to 393,239 francs ($75,895.13), but that in the branches rose from 1,238,776 francs ($239,083.77) to 1,527,382 francs ($294,784.73); but a sum of 600,000 francs ($115,800) was applied to extinguish the losses at three of the branches, reducing the account to 887,382 francs ($171,264.73). During the year a sum of 48,925 francs ($9,442.53) was recovered on bills previously written off on the books. The expenses of the Bank of Paris and branches amounted to 16,322,071 francs ($3,150,159.70), including 2,453,199 francs ($473,467.41) of taxes. The net dividend for the year was 103 francs ($19.88), against 113 francs ($21.81) for 1894.

GREECE.

LEGATION OF THE UNITED STATES,
Athens, May 9, 1896.

SIR: I have the honor to transmit herewith such answers as it has been possible to obtain to the questions of your circular in regard to the coinage and currency of Greece and Servia for the year 1895.

Vice-Consul L. Nicolaides, who is a banker, prepared the answers for Greece; Vice-Consul-General E. Litzikas, of Belgrade, those for Servia.

I have been waiting in order to send you at the same time, statistics for Roumania, but they have not yet been received. I shall forward them as soon as they reach me.

I have the honor to be, sir, your obedient servant,

E. ALEXANDER.

The DIRECTOR OF THE MINT, *Washington, D. C.*

Replies to interrogatories, 1895.

(1 and 2) No gold coined, recoined, or withdrawn from circulation during the calendar year 1895.

(3, 4, 5, 6, 7, 8, 9, and 10) No statistics as to the amount of new or old gold and

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silver, or import and export of gold and silver, either United States or foreign, during the calendar year 1895.

(11 and 12) No United States gold coin was deposited at the mints and melted, and no gold was produced from mines during 1895.

(13) There are no statistics as to the value of silver produced from mines of the country, but a small amount of argentiferous ore from mines at Laurium was exported to England and France, and extracted there.

(14 and 15) There was no output of gold and silver from refineries.

(16 and 17) It is impossible to ascertain the approximate stock of gold and silver coin and bullion in the country at the end of the year.

(18) Amount of Government notes outstanding at the end of the year 1895, 73,771,134 drachmas.

(19) Amount of bank notes outstanding at the end of the year, 60,936,509 drachmas.

(20) Amount of uncovered Government notes at the end of the year, 73,771,134 drachmas. (One dollar is worth 8 drachmas and 80 lepta, at 1 drachma and 76 lepta to the gold franc, the premium on February 27, 1896).

(21) Amount of uncovered bank notes at the end of the year, none.

(22) The actual currency of the country was inconvertible paper.

(23) Average premium of gold as compared with the actual currency of the country during 1895, 1.82.

(24) Average rate of exchange on London during 1895, 45 drachmas and 75 lepta.

(25) No laws were passed during 1895 affecting the coinage, issue, or legal-tender character of the metallic or paper currency.

(26) There is no mint in Greece, consequently no report.

GERMANY.

EMBASSY OF THE UNITED STATES,
Berlin, February 27, 1896.

SIR: Referring to its letter of February 2, 1895, the embassy transmits herewith for your use a document received to-day from Mr. C. Conrad, director of the Prussian mints, which contains a statement of the coinage of the German mints during the year 1895.

I am, sir, your obedient servant,

JOHN B. JACKSON,
Chargé d'Affaires.

The DIRECTOR OF THE MINT, *Washington, D. C.*

Replies to interrogatories, 1895.

(1) There was a total coinage (inclusive of amounts recoined) in 1895 of—

	Marks.
In double crowns	107,224,520
In crowns	289,490
Total	107,514,010

There were recoined 291,930 marks of imperial gold coins retired as no longer fit for circulation. Foreign gold coins of the weight of 38,748.2972 German pounds (the German pound is half a kilogram) pure gold were deposited at the German mints during the calendar year 1895 for recoinage into imperial gold coins.

(2) During the year 1895 silver coins were stamped from thaler pieces which had been melted down, as follows:

	Marks.
In 5-mark pieces	7,301,785
In 2-mark pieces	370,644
Total	7,672,429

(3 to 6) Owing to the absence of official information the questions regarding the weight of gold and silver used in the industrial arts can not be answered.

(7) During the calendar year 1895 the imports of gold were: Gold coin, 19,949 kilograms net, of the value of 49,948,306 marks; gold, crude and in bars, 17,075 kilograms net, of the value of 47,502,650 marks.

The exports of gold during the year were: Gold coin, 24,738 kilograms net, of the value of 62,072,590 marks; gold, crude and in bars, 7,262 kilograms net, of the value of 20,246,256 marks.

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(8) During the calendar year 1895 the imports of silver were: Coined silver, 17,764 kilograms net, of the value of 1,410,106 marks; silver, crude and in bars, 97,824 kilograms net, of the value of 8,628,077 marks.

The exports of silver during the year were: Coined silver, 4,303 kilograms net, of the value of 343,508 marks; silver, crude and in bars, 458,925 kilograms net, of the value of 22,966,648 marks.

To complete the answers to interrogatories 7 and 8, it should be added that besides the above there were the following imports and exports: (*a*) Of pagament (broken gold and broken silver)—Imports, 45,174 kilograms net, of the value of 16,488,510 marks; exports, 5 kilograms net, of the value of 1,850 marks. (*b*) Of incompletely declared gold and silver—Imports, — kilograms net, of the value of — marks; exports, 82 kilograms net, of the value of 37,905 marks.

(9 and 10) The total gold imports direct from the United States during the calendar year 1895 amounted to 9,650 kilograms; they consisted of gold coins exclusively.

(11) During the calendar year 1895 there were deposited on private account at the German mints, for recoinage into imperial gold coins, 25,305.9849 German pounds (the German pound is half a kilogram) of fine gold in dollars and eagles.

(12 to 15) The output of gold and silver by the German refineries in 1895 was: Of pure gold, 4,460.81 kilograms, of the value, at the refineries, of 12,426,924 marks; of pure silver, 393,530.64 kilograms, of the value, at the refineries, of 34,526,911 marks.

The question, "What part of the gold and silver refined came from domestic ores?" can not yet be answered.

(16) The amount of imperial gold coins stamped up to the end of December, 1895, less the amount retired as no longer fit for circulation, was 2,998,455,345 marks. To what extent this amount has been diminished by export to foreign countries, by employment in the industrial arts, and by other causes can not be determined.

The stock of the Imperial Bank in bar gold and foreign gold coin amounted at the end of December, 1895, to 370,023,000 marks.

(17) The total amount of imperial silver coins stamped up to the end of December, 1895, less the pieces withdrawn from circulation, was 483,162,846 marks. How much this amount was decreased by the individual employment of coined pieces or other causes can not be determined. Besides this amount there still remains an amount which can not be exactly determined of 1-thaler pieces in circulation, in the stocks of the banks, or in the public treasuries. In the thirteenth session of the German silver commission (pp. 353 ff. of the report), this remainder was estimated by the commissioner of the Imperial treasury to have been, at the end of April, 1894, about 400,000,000 marks (compare Nos. 13 and 14 of the printed material of the commission). Since then this remainder has been decreased by the withdrawal, between the end of April, 1894, and the end of December, 1895, of 13,147,866 marks in thalers for recoinage into imperial silver coins.

(18) At the end of December, 1895, imperial treasury notes were outstanding, as follows:

	Marks.
Denominations of 5 marks	20,000,000
Denominations of 20 marks	30,000,000
Denominations of 50 marks	70,000,000
Total	120,000,000

(19) The circulation of bank notes, which is regulated by the bank law of March 14, 1875 (R. g. Bl., p. 177), amounted, at the end of December, 1895, to 1,517,600,000 marks.

(20) The issue of imperial treasury notes equals in amount the sum of gold coin which the Empire has laid by, without interest, as a war fund.

(21) The circulation of uncovered bank notes—that is, of bank notes in excess of the specie stock of the banks of issue—amounted, at the end of December, 1895, to 529,932,000 marks. The amounts of legally current German money in the vaults of the banks, as well as of imperial treasury notes, of notes of other German banks, and of foreign coins (the German pound fine being reckoned at 1,392 marks) are considered constituent parts of the stock of specie.

(22) The actual media of circulation of the country consists of the imperial coins, stamped in accordance with the coinage laws of the Empire, and of the thaler piece not yet withdrawn from circulation, the thaler piece being reckoned as the equivalent of 3 marks.

The 120,000,000 marks in imperial treasury notes (compare question 18) are received in payment at their nominal value in all the public treasuries of the Empire, and of all the states of the Empire, and are at all times redeemed in gold on demand at the imperial treasury at Berlin, on account of the Empire. Their acceptance by individuals in trade is not compulsory; in other words, they are not legal tender.

(23) No. Gold is not at a premium as compared with the actual currency of the country.

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(24) The average rate of exchange on London in 1895 was, for bills of exchange:

	Marks.
London, 8 days (short)	20.44
London, 3 months	20.384

(25) No laws were passed during 1895 affecting the coinage, issue, or legal-tender character of the metallic or paper currency.

(26) No report of the operations of the mints are published.

EMBASSY OF THE UNITED STATES,
Berlin, June 15, 1896.

SIR: The embassy, referring to its letter of April 9 last, now incloses a copy with partial translation of the promised further communication in regard to the production of gold and silver in Germany from domestic ores.

I am, sir, your obedient servant,

JOHN B. JACKSON,
Secretary of Embassy.

The DIRECTOR OF THE MINT, *Washington, D. C.*

[Translation.]

The amount of the production of gold and silver from domestic mines during the year 1895 can only be estimated, as official records are not kept. According to this estimation, which has been extended so as to include the years 1894 and 1893, the amount of silver obtained from German ores was as follows:

	Kilograms.
In 1895, about	181,000
In 1894, about	193,000
In 1893, about	179,000

The total production of gold from domestic ores during the three years mentioned can hardly have amounted to more than 100 kilograms a year.

BIMETALLISM IN GERMANY.

The Wirthschaftliche Vereinigung (economic committee) of the Reichstag decided on the 14th instant to bring the following measure before that body:

"The Reichstag shall declare that international bimetallism best answers the interests of Germany, and requests the confederate governments (German states) to do all that is in their power in order to establish and secure, by international convention, a fixed proportion of value between silver and gold."

This economic committee is not a branch of the regular organization of the Reichstag, but a self-constituted committee, with a permanent organization, composed largely of members of the Agrarian Party. It is in the ranks of this party that bimetallism finds its adherents in Germany.

It is known that a corresponding proposition will be submitted simultaneously in Paris and London.

This proposal naturally attracts attention to bimetallism and to the monetary situation in Germany.

Dr. Karl Helfferich has prepared a succinct article on the introduction of the gold standard into Germany, treating also of the past monetary policy of the country and viewing the present state of bimetallism, which I submit herewith:

INTRODUCTION OF A GOLD STANDARD.

(1) One of the most important tasks incumbent on the German Empire after the completion of the Franco-German war was the due ordering of the monetary system. Endeavors to bring about a uniform German monetary standard were almost as old as the diversity of German coinage systems. At the very time when the Franco-German war broke out, the German Governments were preparing for a monetary reform. After the war, the question arose whether Germany should adhere to the silver standard, which existed in all the German States except Bremen, or whether she should proceed to a change in the monetary standard.

(2) The silver standard hitherto in use had entailed material evils. Experience had shown that while a silver standard was in force, a circulation of gold could not be maintained. But silver was too inconvenient for payments of a large amount.

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and, consequently, the public was inclined to use, instead of coin, paper money of all descriptions. This circumstance was taken advantage of by numerous small banks to issue inadequately secured bank notes for small amounts, which, for want of a gold circulation, the public allowed to be thrust upon them. This evil could only be remedied by a sufficient gold circulation.

(3) The question as to whether these evils could be remedied by a transition to a bimetallic standard was scarcely discussed. France had not had the best experience with her bimetallic union, and French public opinion decidedly inclined toward a gold standard. At the international conference of 1867 and in the chamber of commerce inquiry of 1868, the great majority had pronounced in favor of a gold standard; also, a committee of inquiry, who were sitting at the time the Franco-German war broke out, had proposed the transition to a gold standard by a vote of 17 to 6. Germany, therefore, had to reckon with the probability that France, as well as the other States comprised in the Latin Union, would, sooner or later, exchange their bimetallic for a gold standard. Thus, especially after Germany had come into the possession of five milliards by way of war indemnity, there was in Germany a general consensus of opinion that the only expedient measure would be a transition to a gold standard. A few theoreticians only spoke in favor of a bimetallic standard; commerce and industry were unanimously in favor of a gold standard.

(4) In the autumn of 1871 the project of a provisional coinage act was submitted to the federal council and the Imperial Diet. The deliberations were pushed forward, and in December, 1871, the act was promulgated. It authorized the coinage of imperial gold coins of 10 and 20 marks' value, and the making of these coins a legal tender side by side with the silver coins hitherto in use, in a proportion of 15½ to 1, as between silver and gold. The further coinage of silver was prohibited.

(5) This measure was followed by the coinage act of July, 1873, which ordered the gradual withdrawal from circulation of the old silver coinage and the coinage of silver token coins of the new system, while the amount of silver constituting a legal tender was limited to 20 marks. The coinage of gold for private account was authorized, and this provision was subsequently supplemented by the bank act, by which the duty was imposed on the Imperial Bank of buying any quantity of gold offered to it at the rate of 1,392 marks per pound.

ACCOMPLISHMENT OF THE MONETARY REFORM.

(6) When Germany decided to adopt a gold standard, she had a circulation of silver to the amount of about 1,580,000,000 marks. Of this amount, even after the adoption of the gold standard, from 400,000,000 to 450,000,000 marks could still be used as small change (10 marks per head of the population). There remained to withdraw from circulation the balance of over 1,100,000,000 marks to melt down and sell it against gold. Of course this enormous quantity of silver could not be either withdrawn from circulation immediately or thrown all at once upon the market. On the contrary, this operation had to be divided over a number of years. The German sales of silver commenced in 1873, hesitatingly and cautiously, and steadily increased up to the year 1877.

(7) Meanwhile, the price of silver fell. Since about the end of the sixties, the demands for India had been steadily decreasing, and had finally fallen to one-third of the average for the years 1855 to 1865. Moreover, a number of countries effected changes in their monetary systems either simultaneously with, or immediately after, Germany. The Scandinavian Kingdoms and the United States adopted a gold standard; the Netherlands discontinued the coining of silver, and the countries belonging to the Latin Union first limited their issue of silver coin and then discontinued it. This twofold cause of diminution of the demand coincided with an increase in the production of silver. These circumstances led to a considerable fall in the price of silver, and the melting down and sale of the German silver coin was thereby rendered unprofitable. In May, 1879, it became known that the German Government had discontinued its sales of silver, and since that time they have not been resumed.

(8) The consequence of the cessation of the sales of silver is that, to this day, there are in circulation in Germany, besides the new silver token coins, about 400,000,000 marks in old silver thalers (a thaler is equivalent to 3 marks, or 71.4 cents), which still remain a legal tender to an unlimited amount. About half of this amount is always in the hands of the Imperial Bank, while the other half is in circulation. Hitherto the Imperial Bank has never made use of its right to redeem its notes in silver thalers, but has always paid in gold when gold was demanded. In the bullion stock of the bank there figures, side by side with the 200,000,000 marks in thalers, an amount of about 600,000,000 to 700,000,000 marks in gold. Altogether Germany possesses, including the stock of uncoined gold in the bank cellars, a monetary stock of gold to the amount of about 2,700,000,000 marks. Under these circumstances the 400,000,000 marks in thalers can not be held to endanger the German monetary system. Hence, notwithstanding the cessation of the sales of silver, the transition to a gold standard has been carried out with complete success.

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BIMETALLISM IN GERMANY.

(9) The bimetallic movement did not originate on German soil, but was imported from abroad. Dr. Arendt, the leader of the bimetallic agitation, wrote on one occasion as follows: "Before the German Government in May, 1879, suspended the sales of silver, the monetary-standard question was looked upon as disposed of in Germany." Germany was the only great power that did not participate in the Paris monetary conference of 1878.

(10) It was not until the Government showed signs of stopping on the road toward a complete carrying through of the gold standard that bimetallism succeeded in gaining ground in Germany. About the end of the seventies, Mr. Cernuschi, a Frenchman, and Mr. Kelley, an American, traveled over Germany in order to agitate for bimetallism. Mr. Kardorff, a protectionist and agrarian, was the first representative of bimetallism in Germany, and up to the present day he champions the cause of bimetallism. He was soon joined by Leuschner, director of the Mansfeld Copper Mining Association, which had been seriously affected by the fall of silver. Somewhat later, these gentlemen found a partisan of great dialectical ability and activity in the person of Dr. Arendt, who, since that time, has been the intellectual head of the bimetallic movement in Germany. At that time—that is to say, at the end of the seventies—the arguments of the German bimetallists against the gold standard were: (*a*) Either the sales of silver must be resumed and completely carried through or the gold standard must be abandoned and a bimetallic standard adopted; (*b*) through the fall of the price of silver, the German silver-mining industry has been injured, and, further, the German income from securities made out for an amount in silver (especially Austrian securities) has greatly fallen off; (*c*) a continued decrease of the production of gold, and hence a rise in the value of gold is imminent.

(11) A number of professors were inclined to favor bimetallism—for instance, Wagner, Schäffle, Lexis, Neuwirth, and, subsequently, Conrad. Great stress was laid upon the predictions of Professor Suess, of Vienna, that the gold mines of the world were nearly exhausted. When a demand for gold arose in consequence of the United States and Italy adopting cash payments in gold, and when, consequently, the great banks of Europe increased their rates of discount, these transient disturbances were represented as permanent, and it was asserted that the prophesied scarcity of gold had arrived. People spoke of "the folly of pulling up the gold blanket, which is too short for the bed," and of "paralyzing trade by high discounts."

(12) The arguments thus brought forward on the part of the bimetallists were soon proved to be fallacious. It appeared that the situation created with regard to the German monetary system through the cessation of the silver sales was not serious. The stock of thalers still in existence was not capable of unfavorably influencing the German money market. From the year 1883 the production of gold commenced to increase. The drain of gold to America ceased and soon America commenced to send gold to Europe in considerable quantities, and consequently the rates of discount fell to a normal level. In short, facts afforded a striking refutation of the arguments advanced at that time by the bimetallists. But the bimetallists did not, for this reason, abandon their agitation. They soon availed themselves of the decline in the general level of prices in order to demonstrate thereby an alleged increase in the value of gold. The fall of the prices of agricultural products was attributed by them to the gold standard, and by holding out a prospect of an increase of prices they endeavored to gain over to their side those interested in agriculture. By such an agitation the peasantry, who could not possibly form an opinion of their own on the monetary-standard question, were stirred up against the gold standard. When, about the middle of the eighties, the Indian exportation of wheat increased very considerably, the bimetallists at once took advantage of this fact for their agitation. It was then that the assertion first cropped up that the depreciation of silver favored the exportation of grain from silver-using countries, that it was swamping Europe with cereals, and thereby destroying home agriculture.

(13) The bimetallists upheld their new argument even when the Indian wheat exports, notwithstanding the continued depreciation of silver, ceased to make any further advance, and even when at last a distinct decline set in. When Russia, and more recently the Argentine Republic, appeared in the grain market as competitors this, too, was laid to the charge of the gold standard and the silver depreciation, although these two countries do not possess a silver but a paper standard. In view of this ignorance of the most important facts agitators had an easy task among the rural population. On the other hand, German bimetallists have not hitherto been able to secure any success among people concerned in industry and commerce. For years past they have been untiring in prophesying the destruction of German trade with silver-using countries, yet the exports to silver-using countries are steadily increasing, while the exports to gold-standard countries have somewhat declined.

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Accordingly the entire mercantile community in the Hanseatic towns, which are chiefly interested in the trade with silver-using countries, adheres with full energy to the gold standard. Similarly, with none but most insignificant exceptions, the whole of the German chambers of commerce advocate the maintenance of the gold standard. Nor have bimetallists been more successful in their continued endeavors to gain over the working classes. They hold out to them a prospect of increased employment and of an improvement in their general condition, and have been asserting for about fifteen years past that the gold standard leads to a decline of wages. But German workingmen possess sufficient intelligence to see that during the twenty-five years of the existence of the German gold standard wages have not only not declined, but have actually risen, and that, on the other hand, it is the workingmen, whose wages are very slow in accommodating themselves to the altered value of money, who would have to suffer most through a diminution of the purchasing power of money. Thus the bimetallic movement has remained essentially confined, in Germany, to the agricultural classes.

MONETARY POLICY HITHERTO PURSUED BY THE GERMAN GOVERNMENT.

(14) The German Government has rarely assumed a position calculated to encourage bimetallists, though it is true that the Government has not always been uniformly firm in this respect. We have already mentioned that the German Government abstained from attending the Paris monetary conference of 1878. Prince Bismarck, imperial chancellor, caused the conference which was held in Paris in 1881 to be attended by two German delegates. But their proposals were so little of a nature to be considered concessions to bimetallism that they virtually tended toward the full carrying through of the German gold-standard system.

(15) Early in the eighties the bimetallists repeatedly moved resolutions in the Reichstag, but the Government did not receive them in a friendly spirit. Gradually, however, the resistance on the part of the Government relaxed. In 1885, during the debate on the monetary question, the Government avoided taking either side, and a rumor was spread to the effect that Prince Bismarck was ready to change his monetary policy; consequently the bimetallic agitation increased to fever heat. No less than 1,161 petitions, all identically worded, were submitted to the Reichstag, most of them being signed by agricultural associations.

(16) The Government now considered it advisable to give up their position of reserve. Quite unexpectedly, in January, 1886, Mr. Scholz, the minister of finance, rose in the Prussian Diet to give vent to a condemnation of the bimetallic agitation, and pronounced himself most decidedly in favor of the gold standard. As soon as the bimetallists had encountered this decided check on the part of the Government their agitation fell off considerably. Besides, notwithstanding all predictions, the German monetary situation improved more and more; how much, is illustrated by the following figures: In 1880 the bullion stock of the German Imperial Bank was said to consist of 185,000,000 marks in gold and 380,000,000 marks in silver. At the end of 1894 the German Bank possessed 715,000,000 marks in gold and 300,000,000 marks only in silver. The number of adherents to the bimetallic party fell off visibly, and a number of professors who about fifteen years previously had inclined toward bimetallism now sided in favor of the gold standard.

(17) The Government maintained their position even when, after the retirement of Bismarck, Caprivi conducted the policy of the Empire. It was not until the spring of 1894 that the new chancellor made a concession, which in itself was not prejudicial. His object was to break the resistance of the Agrarians to the conclusion of a commercial treaty with Russia, and he convoked the "silver commission" in order to gain over, by this concession in the field of monetary policy, a portion of his opponents in the domain of commercial policy. But this transaction of the "silver commission" had no practical results, and the German monetary policy continued in the same course as heretofore.

THE PRESENT SITUATION.

(18) After the retirement of Caprivi, Prince Hohenlohe came to the head of affairs, and the bimetallists made a fresh attempt. This new attack was made in the hope that something might be expected from the new Government, and it was hoped that a favorable vote might be obtained in the Reichstag. In fact, the majority of the Reichstag, on the 16th of February, 1895, voted in favor of a resolution requesting the Government to convoke an international monetary conference for the purpose of an international regulation of the monetary-standard question. The Reichstag did not vote in favor of bimetallism; on the contrary, the demand for bimetallism had been purposely eliminated from the resolution in order to secure for it a majority. On this occasion, the imperial chancellor made a declaration, holding out a remote prospect of negotiations with foreign Governments with a view to raising the price of silver.

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(19) The bimetallists now used every means in order to urge the Government to convoke an international conference and adopt a double standard. When, during the last weeks of Lord Rosebery's government, any discussions on the monetary question took place in the Prussian Diet, Dr. Arendt pointed to Mr. Balfour as the coming man, and asserted that very shortly, the English Government, aided by him and Mr. Chaplin, would take the lead in the bimetallic movement.

(20) The friends of a gold standard in Germany considered it necessary to oppose the bimetallic assault by an organized resistance. After the most important chambers of commerce had passed resolutions in favor of the gold standard, early in April of last year, a Society for the Defense of the German Gold Standard was founded, the committee of which comprised the leading manufacturers and commercial men, politicians, and savants. The president of the society is the former president of the imperial chancellor's office, Mr. Delbrück, and one of the members of the board is Dr. Ludwig Bamburger, who, with Mr. Delbrück, was the originator of the German gold standard. Professor Huber, of Stuttgart, edits the papers of the association.

(21) The activity of the society has not remained without influence on the position taken by the public press as well as by the German federal governments. When an inquiry was made by the imperial chancellor, not a single State pronounced in favor of bimetallism, while many decidedly sided against it. On the 8th of February of the present year, Prince Hohenlohe, the imperial chancellor, gave the official reply of the Bundesrath to the resolution of the 16th of February, 1895, which has been previously mentioned. Prince Hohenlohe declared that all the German governments had unanimously decided not to conform to the resolution of the Reichstag inviting them to convoke an international monetary conference. This declaration was expressed with some diplomatic reserve, in order to render it as palatable as possible to the Agrarian bimetallists; but the real and practical effect of it is to defeat the bimetallic movement in Germany.

THOS. EWING MOORE,
Commercial Agent.

WEIMAR, *March 16, 1896.*

TABLE OF THE COINAGES OF THE GERMAN MINTS DURING THE CALENDAR YEAR 1895.

There were coined—	Gold coins.			
	Double kronen.	Kronen.	Half kronen.	Coined on private account.
	Marks.	*Marks.*	*Marks.*	*Marks.*
To the end of 1894	2,329,700,360	537,402,790	27,969,925	1,572,310,060
For the year 1895 in—				
Berlin	82,896,180	289,490	.....	82,896,180
Hanover[1]	.....	.....	.....	.....
Frankfort on the Main[2]	.....	.....	.....	.....
Munich	10,021,900	.....	.....	10,021,900
Muldener Hütte	2,263,000	.....	.....	2,263,000
Stuttgart	.....	.....	.....	.....
Karlsruhe	2,021,160	.....	.....	2,021,160
Darmstadt[3]	.....	.....	.....	.....
Hamburg	10,022,280	.....	.....	10,022,280
Total for 1895	107,224,520	289,490	.....	107,224,520
Up to the end of 1895	2,436,924,880	537,692,280	27,969,925	1,679,534,580
Number of pieces	121,846,244	53,769,228	5,593,985	.....

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TABLE OF THE COINAGES OF THE GERMAN MINTS DURING THE CALENDAR YEAR 1895—Continued.

There were coined—	Silver coins.				
	5-mark pieces.	2-mark pieces.	1-mark pieces.	50-pfennig pieces.	20-pfennig pieces.
	Marks.	*Marks.*	*Marks.*	*Marks.*	*Marks.*
To the end of 1894	84,372,480	111,966,266	184,992,554	71,486,552	35,717,922.80
For the year 1895 in—					
Berlin	4,372,025	137,400			
Hanover[1]					
Frankfort on the Main[2]					
Munich	703,195				
Muldener Hütte	447,415	233,244			
Stuttgart	1,003,560				
Karlsruhe	367,090				
Darmstadt[3]					
Hamburg	408,500				
Total for 1895	7,301,785	370,644			
Up to the end of 1895	91,674,265	112,336,910	184,992,554	71,486,552	35,717,922.80
Number of pieces	18,334,853	56,168,455	184,992,554	142,973,104	178,589,614.00

There were coined—	Nickel coins.			Copper coins.		
	20-pfennig pieces.	10-pfennig pieces.	5-pfennig pieces.	2-pfennig pieces.	1-pfennig pieces.	Total number of pieces.
	Marks.	*Marks.*	*Marks.*	*Marks.*	*Marks.*	
To the end of 1894	5,005,860.80	31,261,081.80	16,164,417.55	6,213,207.44	6,447,536.38	
For the year 1895 in—						
Berlin					201,516.14	
Hanover[1]						
Frankfort on the Main[2]						
Munich					14,957.45	
Muldener Hütte			34,314.50		11,908.00	
Stuttgart			100,227.30		43,657.00	
Karlsruhe			47,010.65		30,511.88	
Darmstadt[3]						
Hamburg					38,386.59	
Total for 1895			181,552.45		340,937.06	
Up to the end of 1895	5,005,860.80	31,261,081.80	16,345,970.00	6,213,207.44	6,788,473.44	
Number of pieces	25,029,304	312,610,818	16,345,970	310,660,372	678,847,344	2,416,335,275

[1] Ceased operations since 1878.
[2] Ceased operations since 1880.
[3] Ceased operations since 1883.

RECAPITULATION.

Up to the end of 1895 in—	Gold coins.	Silver coins.	Nickel coins.	Copper coins.	Total.
	Marks.	*Marks.*	*Marks.*	*Marks.*	*Marks.*
Berlin	1,860,740,760	179,190,553.10	18,440,172.75	5,030,522.23	2,063,402,008.08
Hanover	191,656,420	50,633,984.00	3,006,071.70	1,097,396.60	246,393,872.30
Frankfort on the Main	251,491,830	41,510,222.10	4,930,433.90	1,803,516.28	299,736,002.28
Munich	187,509,195	66,831,247.80	7,343,008.60	1,345,139.00	263,028,590.40
Muldener Hütte	103,495,170	31,217,453.00	4,159,415.50	800,808.73	139,672,847.23
Stuttgart	112,315,895	47,685,979.90	4,984,264.00	1,117,445.50	166,103,584.40
Karlsruhe	69,674,145	32,369,875.60	3,887,769.85	842,210.54	106,774,000.99
Darmstadt	33,241,310	13,631,377.00	1,272,684.90	278,179.59	48,423,551.49
Hamburg	192,462,360	33,137,511.30	4,589,091.40	686,462.41	230,875,425.11
Total	3,002,587,085	496,208,203.80	52,612,912.60	13,001,680.88	3,564,409,882.28

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There were further coined in the Royal Prussian mint at Berlin—

FOR THE GERMAN EAST AFRICAN COMPANY.

Denominations.	Up to the end of 1895.
Silver coins:	*Rupees.*
2-rupee pieces	101,708
1-rupee pieces	830,942
½-rupee pieces	30,000
¼-rupee pieces	15,000
Total	977,650
Copper coins:	*Pesas.*
Pesa pieces	41,092,335

FOR THE DUTCH NEW GUINEA COMPANY.

Denominations.	Up to the end of 1894.	In 1895.	Up to the end of 1895.
Gold coins:	*Marks.*	*Marks.*	*Marks.*
20-mark pieces	.....	30,000	30,000
10-mark pieces	.....	20,000	20,000
Total	.....	50,000	50,000
Silver coins:			
5-mark pieces	115,000	.....	.....
2-mark pieces	30,000	.....	.....
1-mark pieces	45,000	.....	.....
½-mark pieces	10,035	.....	.....
Total	200,035	.....	.....
Bronze coins:			
10-pfennig pieces	.....	10,000	10,000
2-pfennig pieces	.....	5,000	5,000
1-pfennig pieces	.....	5,000	5,000
Total	.....	20,000	20,000

FOR THE EGYPTIAN GOVERNMENT.

Denominations.	Up to the end of 1895.	Denominations.	Up to the end of 1895.
Gold coins:	*Piasters.*	Nickel coins:	*Piasters.*
100-piaster pieces	5,202,400	5-Ochr-el-Guercho pieces	11,005,790.00
Silver coins:		2-Ochr-el-Guercho pieces	1,041,884.40
20-piaster pieces	22,756,000	1-Ochr-el-Guercho pieces	574,167.50
10-piaster pieces	62,168,600	Total	12,621,841.90
5-piaster pieces	34,359,980		
2-piaster pieces	11,080,000	Bronze coins:	
1-piaster pieces	8,737,681	½-Ochr-el-Guercho pieces	428,089.70
Total	139,102,261	¼-Ochr-el-Guercho pieces	103,630.125
		Total	531,719.825

FOR THE SOUTH AFRICAN REPUBLIC.

Denomination.	Up to the end of 1895.	Denomination.	Up to the end of 1895.
Gold coins:	*Pounds.*	Silver coins—Continued.	*Pounds.*
1-pound pieces	15,650.00	1-shilling pieces	4,015.00
½-pound pieces	5,075.00	6-pence pieces	707.50
Total	20,725.00	3-pence pieces	303.75
		Total	10,175.50
Silver coins:			
5 shilling pieces	1,081.75	Bronze coins:	
2½-shilling pieces	2,037.50	1-penny pieces	$116\frac{33}{240}$
2-shilling pieces	2,030.00		

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FOR THE ITALIAN GOVERNMENT.

Denominations.	Up to the end of 1895.
Nickel coins:	
20-centesimi pieces	*Lire.* 15,000,000

FOR THE REPUBLIC OF SANTO DOMINGO.

Denominations.	In 1895.	Up to the end of 1895.
Nickel coins:		
2½-centavo pieces	*Pesos.* 100,000	*Pesos.* 100,000

C. CONRAD,
Director of the Royal Prussian Mint.

BERLIN, *February 14, 1896.*

GREAT BRITAIN.

EMBASSY OF THE UNITED STATES,
London, September 7, 1896.

SIR: Under instructions from the Department of State, I now transmit directly to you (and herewith inclosed) certain documents containing information relating to coinage and production of gold and silver in this Kingdom, which were to-day received from the foreign office, accompanied by the promise of the transmission of the further information desired as to banking so soon as it could be procured.

I am, sir, your obedient servant,

T. F. BAYARD.

The DIRECTOR OF THE MINT, *Washington, D. C.*

Answers to interrogatories, 1895.

(1) Amount of gold coined in London during the calendar year 1895:

Sovereigns	£2,313,300
Half sovereigns	1,497,336
Total	3,810,636

Light gold coin withdrawn from circulation (Imperial coin only):

Sovereigns	£1,560,000
Half sovereigns	840,000
Total	2,400,000

(2) Amount of silver coined in London during the calendar year 1895:

Crowns	£63,162	Threepences	£60,502
Half crowns	224,532	Twopences (Maundy)	79
Florins	218,394	Pence (Maundy)	66
Shillings	444,510		
Sixpences	175,626	Total	1,187,010
Fourpences (Maundy)	139		

Worn Imperial silver coin withdrawn from circulation (nominal value), £443,992, 15s., 11d.

(3, 4, 5, and 6) No information available as to the weight of fine gold or silver nor the amount of new or old gold and silver used in the industrial arts during the calendar year 1895.

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(7) Imports and exports of gold in 1895:

Description.	Imports.		Exports.	
	Weight.	Value.	Weight.	Value.
	Ounces.		*Ounces.*	
Coin (British)	2,294,513	£8,933,061	3,281,392	£12,778,259
Coin (foreign)	3,190,652	12,354,882	476,252	1,829,603
Bullion	3,916,616	14,718,056	1,628,121	6,761,461
Ore	*a* 850	200,269	*a* 139	20,728
Total		36,206,268		21,390,051

a Tons.

(8) Imports and exports of silver in 1895:

Description.	Imports.		Exports.	
	Weight.	Value.	Weight.	Value.
	Ounces.		*Ounces.*	
Coin (British)	626,371	£168,546	1,485,335	£408,231
Coin (foreign)	9,525,950	1,177,876	9,673,849	1,177,127
Bullion	75,598,098	9,323,240	67,728,334	8,772,078
Ore		1,747,544		370,953
Total		12,417,206		10,728,389

(9) No information available as to the total import of United States gold coin during the year.

(10) The following statement shows the registered quantity and value of foreign gold coin and bullion imported into the United Kingdom direct from the United States of America in the year 1895:

Description.	Quantity.	Value.
	Ozs. Troy.	
Foreign gold coin	2,725,360	£10,547,000
British gold coin	3,672	14,250
Gold bullion	149,310	570,706
Total	2,878,342	11,131,956

NOTE.—The returns do not distinguish the nationalities of the foreign coin imported into the United Kingdom.

(11) No United States gold coin was received at the Royal mint during the year.

(12) Weight expressed in kilograms (fine) and the value of the gold produced from the mines of the country during the calendar year 1895: 161.5 kilograms (fine); value, £22,055.

(13) Weight expressed in kilograms (fine) and the value of the silver produced from the mines of the country during the calendar year 1895: 8,722 kilograms (fine); value (commercial), £34,908.

(14 and 15) No information available as to the weight and value of the gold and silver output of the refineries of the country during the year.

(16) Approximate stock of gold coin and bullion in the country at the close of the calendar year 1895: Considerable variation exists between the estimates of various authorities as to the volume of the gold currency, but it is probably about £90,000,000 in sovereigns and half sovereigns. No details are available as to the amount of gold bullion in the United Kingdom.

(17) Approximate stock of silver coin and bullion in the country at the close of the calendar year 1895: The volume of the silver currency is even more uncertain owing mainly to this question not having been the subject of so much inquiry and the quantity of silver bullion in the country is quite unknown.

(18) No notes are issued by the Government.

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(19) Amount of bank notes outstanding at the end of the year 1895:

	Period.	Average circulation.
England and Wales:		
Bank of England	Week ended January 1, 1896	£26,468,425
Private banks	Week ended December 28, 1895	684,951
Joint stock banks	do	1,040,667
Total for England and Wales		28,194,043
Scotland	Four weeks ended December 28, 1895	7,326,083
Ireland	do	6,459,258
Total for United Kingdom		41,979,384

(20) Uncovered Government notes at the end of the year 1895: No notes are issued by the Government.

(21) Amount of uncovered bank notes at the end of the year 1895:

Amount of notes in circulation in the United Kingdom		£41,979,384
Deduct for—		
Gold and bullion held in Bank of England against notes in circulation	£9,668,425	
Gold and silver coin held by Scottish and Irish banks of issue	9,342,806	
		19,011,231
Amount of notes uncovered by coin or bullion[1]		22,968,153

(22) The currency of the country is gold, with subsidiary coins of silver and bronze, supplemented by a convertible paper currency.

(23) Gold is not at a premium.

(24) Average rate of exchange on London during 1895: ?

(25) No laws were passed during the year which affect the currency.

(26) A copy of the report of the deputy master of the mint on the operations of the department during 1895 is sent herewith.

QUANTITIES AND TOTAL VALUES OF THE REGISTERED IMPORTS OF GOLD AND SILVER COIN AND BULLION INTO GREAT BRITAIN, 1890–1895.

IMPORTS OF GOLD.

Countries from which imported.	British gold coin.					
	1890.	1891.	1892.	1893.	1894.	1895.
	Ounces.	*Ounces.*	*Ounces.*	*Ounces.*	*Ounces.*	*Ounces.*
Germany	23,651	58,793	44,563	39,079	70,119	79,942
Holland	37,695	2,762	1,198	160,295	207,632	35,100
Belgium	150,439	111,464	79,783	199,841	83,802	239,001
France	292,293	169,254	59,875	167,591	74,748	219,215
Portugal, Azores, and Madeira	442,376	1,589,667	503,960	315,056	201,069	122,384
Spain and Canaries	26,712	28,270	11,084	6,591	4,550	9,697
Gibraltar	2,878	4,776	4,370	3,248	2,144	2,607
Malta	13,275	7,263	2,526	2,917	10,762	8,361
Turkey	633	598	3,425	1,795	386	924
Egypt	92,598	.....	144,211	269,001	266,269	310,917
West Coast of Africa	132	.....	.....	4,725	3,657	2,997
British Possessions in South Africa	1,232	14,902	45,108	17,504	16,869	765
British East Indies	9,992	31,613	43,206	12,946	53,223	23,649
China, including Hongkong	11,418	67,170	148,056	41,011	29,621	12,280
Australasia	474,127	997,035	691,346	851,206	1,041,370	1,178,883
British North America	.....	.....	43	46	2,580	.....
Mexico, West Indies, and South America (except Brazil)	177,747	15,812	113,123	89,954	11,329	25,172
Brazil	586,355	822,724	110,079	143,490	21,323	8,870
United States of America	.....	553	.....	34,043	8,127	3,672
Other countries	30,246	19,604	82,136	55,007	9,843	10,074
Total:						
Ounces	2,373,799	3,942,320	2,088,092	2,415,346	2,110,423	2,294,513
Value (dollars)	44,980,022.94	74,695,514.31	39,556,702.87	45,772,079.88	40,196,195.04	43,472,741.36

[1] This amount includes £16,800,000 which the Bank of England is authorized to issue against securities.

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QUANTITIES AND TOTAL VALUES OF THE REGISTERED IMPORTS OF GOLD AND SILVER COIN AND BULLION INTO GREAT BRITAIN, 1890–1895—Continued.

IMPORTS OF GOLD—Continued.

Countries from which imported.	Foreign gold coin.					
	1890.	1891.	1892.	1893.	1894.	1895.
	Ounces.	*Ounces.*	*Ounces.*	*Ounces.*	*Ounces.*	*Ounces.*
Germany	28,435	56,993	885	185	7,928	25,652
Holland	641,588				6	102,564
Belgium	16,996		1,393	23,345	444	32
France	103,670	152,959	126,306	32,552	15,574	80,855
Portugal, Azores, and Madeira	132	19,496	47,249	18,172	22,911	10,788
Spain and Canaries	4,045	7,406	4,837	9,276	5,799	6,339
Gibraltar	4,418	4,886	3,705	4,054	1,700	2,231
Malta			57			
Turkey	4,229			141		
Egypt	2	359				
West Coast of Africa	1,576	714	37	1,705	6,996	7,609
British Possessions in South Africa	557	356	1,140	2,107	522	313
British East Indies	51	4,136	25,147	513	13	319
China, including Hongkong	18,191	88,161	101,727	92,026	126,487	131,542
Australasia	666	6,910	289	2,348	747	361
British North America						92
Mexico, West Indies, and South America (except Brazil)	55,794	20,410	16,270	93,946	7,467	23,441
Brazil	42,545	12,239	15,600	4,380	26,352	5,494
United States of America	539	1,656,696	196,352	991,998	796,241	2,725,360
Other countries	88,535	1,767	86,138	34,907	95,295	67,660
Total:						
Ounces	1,011,969	2,033,438	627,132	1,311,655	1,114,482	3,190,652
Value (dollars)	19,124,167.31	38,325,989.35	11,812,757.17	24,758,820.00	21,170,530.56	60,125,033.25

Countries from which imported.	Gold bullion.					
	1890.	1891.	1892.	1893.	1894.	1895.
	Ounces.	*Ounces.*	*Ounces.*	*Ounces.*	*Ounces.*	*Ounces.*
Germany	275	1,127	1,256	3,174	1,236	2,924
Holland	118,045	2,705	90	7,296	210	23,399
Belgium	2,181	296		6,442		23,248
France	802,732	112,013	99,092	230,539	167,703	42,135
Portugal, Azores, and Madeira	8	3,932	5,378	740	3,252	58
Spain and Canaries	129	534	2,166	208	23	124
Gibraltar	42	44	42	33	45	53
Malta		261				260
Turkey	21			15	6	37
Egypt	26,448	2,576	2,178	5,537		21,476
West Coast of Africa	37,242	45,212	53,402	34,286	30,326	34,916
British Possessions in South Africa	480,144	626,020	1,098,066	1,409,628	1,974,123	2,280,191
British East Indies	107,548	166,391	712,868	291,743	815,257	488,059
China, including Hongkong	37,063	136,047	339,665	237,521	371,708	141,125
Australasia	62,149	93,405	117,332	101,203	208,944	327,929
British North America						77
Mexico, West Indies, and South America (except Brazil)	253,920	274,716	333,962	296,615	320,339	313,893
Brazil	16,440	18,886	19,486	16,833	20,851	50,724
United States of America	671,024	324,001	75,053	66,342	26,920	149,310
Other countries	9,349	3,150	7,388	7,768	3,505	16,678
Total:						
Ounces	2,624,760	1,811,316	2,867,424	2,715,923	3,944,448	3,916,616
Value (dollars)	50,589,720.22	34,314,801.06	53,665,338.48	50,327,299.07	72,814,101.08	71,625,419.52

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QUANTITIES AND TOTAL VALUES OF THE REGISTERED IMPORTS OF GOLD AND SILVER COIN AND BULLION INTO GREAT BRITAIN, 1890–1895—Continued.

IMPORTS OF GOLD—Continued.

Countries from which imported.	Total ounces of gold.					
	1890.	1891.	1892.	1893.	1894.	1895.
	Ounces.	*Ounces.*	*Ounces.*	*Ounces.*	*Ounces.*	*Ounces.*
Germany	52,361	116,913	46,704	42,438	79,283	108,518
Holland	797,328	5,467	1,288	167,591	207,848	161,063
Belgium	169,616	111,760	81,176	229,628	84,246	262,281
France	1,198,695	434,226	285,273	430,682	258,025	342,205
Portugal, Azores, and Madeira	442,516	1,613,095	556,587	333,968	227,232	133,230
Spain and Canaries	30,886	36,210	18,087	16,075	10,372	16,160
Gibraltar	7,338	9,626	8,117	7,335	3,889	4,891
Malta	13,275	7,524	2,583	2,917	10,762	8,624
Turkey	4,883	598	3,425	1,951	392	961
Egypt	119,048	2,935	146,389	274,538	266,269	332,393
West Coast of Africa	38,950	45,926	53,439	40,716	40,979	45,522
British Possessions in South Africa	481,933	641,308	1,144,314	1,429,239	1,991,514	2,281,269
British East Indies	117,591	202,140	781,221	305,202	868,493	512,027
China, including Hongkong	66,672	291,378	589,448	370,558	527,816	284,947
Australasia	536,942	1,097,350	808,967	954,757	1,251,061	1,507,173
British North America	.....	.....	43	46	2,580	169
Mexico, West Indies, and South America (except Brazil)	487,461	310,038	463,355	480,515	339,135	362,506
Brazil	645,340	853,849	145,165	164,703	68,526	65,088
United States of America	671,563	1,981,250	271,405	1,092,383	831,288	2,878,342
Other countries	128,130	24,581	175,662	97,682	108,643	94,412
Total:						
Ounces	6,010,528	7,787,074	5,582,648	6,442,924	7,178,353	9,401,781
Value (dollars)	114,693,910.47	147,336,304.72	105,034,798.52	120,858,198.95	134,180,826.68	175,223,194.13

Countries from which imported.	Total value of gold.					
	1890.	1891.	1892.	1893.	1894.	1895.
Germany	$992,960.66	$2,230,029.83	$882,349.98	$807,045.76	$1,504,833.73	$2,049,730.87
Holland	15,109,183.14	103,442.32	24,278.97	3,182,968.39	3,939,514.48	3,020,208.30
Belgium	3,205,865.27	2,109,700.75	1,536,246.99	4,340,197.76	1,588,853.85	4,966,302.18
France	23,593,205.65	8,212,267.42	5,405,065.82	8,227,703.95	4,904,448.97	6,491,969.40
Portugal, Azores, and Madeira	8,398,800.36	30,541,365.63	10,520,462.96	6,325,092.25	4,307,898.80	2,526,073.62
Spain and Canaries	584,860.84	684,682.48	341,131.92	301,382.35	196,090.75	304,516.37
Gibraltar	139,215.97	182,625.15	154,170.72	139,162.43	73,829.67	92,721.42
Malta	251,563.98	142,087.20	48,874.26	55,225.04	207,478.36	166,687.36
Turkey	73,343.02	11,343.81	64,992.11	37,087.60	7,470.08	18,259.11
Egypt	2,253,384.16	55,697.09	2,774,357.58	5,209,004.27	5,067,286.92	6,322,770.93
West Coast of Africa	733,697.87	864,947.38	1,006,231.61	767,753.64	772,615.27	838,785.07
British Possessions in South Africa	9,132,848.62	12,115,726.00	20,927,541.35	25,915,275.59	35,838,390.28	40,654,317.61
British East Indies	2,231,757.43	3,839,644.17	14,827,403.06	5,792,380.82	16,483,784.47	9,727,968.04
China, including Hongkong	1,265,416.53	5,529,336.77	11,183,839.91	7,032,652.15	10,016,230.30	5,419,767.52
Australasia	10,204,437.32	20,829,393.77	15,364,664.66	18,041,692.25	23,616,978.51	28,543,565.18
British North America	.....	.....	807.84	900.30	48,665.00	2,992.90
Mexico, West Indies, and South America (except Brazil)	9,241,108.78	5,894,168.54	8,788,120.36	9,109,883.61	6,445,888.51	6,877,542.19
Brazil	12,229,261.44	16,176,800.78	2,743,873.83	3,124,424.40	1,300,328.80	1,237,078.90
United States of America	12,624,961.42	37,351,282.94	5,110,827.50	20,595,062.07	15,799,647.03	54,173,663.87
Other countries	2,428,038.01	461,762.69	3,329,557.09	1,853,304.32	2,060,592.90	1,788,273.29
Total	114,693,910.47	147,336,304.72	105,034,798.52	120,858,198.95	134,180,826.68	175,223,194.13

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QUANTITIES AND TOTAL VALUES OF THE REGISTERED IMPORTS OF GOLD AND SILVER COIN AND BULLION INTO GREAT BRITAIN, 1890–1895—Continued.

IMPORTS OF SILVER.

Countries from which imported.	British silver coin.					
	1890.	1891.	1892.	1893.	1894.	1895.
	Ounces.	*Ounces.*	*Ounces.*	*Ounces.*	*Ounces.*	*Ounces.*
Germany	376	5,998	5,141	5,132	3,502	9,128
Holland	7,584	15,318	15,650	14,933	9,940	6,671
Belgium	146,046	65,587	29,981	44,923	46,206	60,454
France	18,704	36,030	29,741	65,796	25,787	12,877
Portugal, Azores, and Madeira	476	387	.....	1,533	6,687	2,188
Spain and Canaries	500	4,147	2,671	3,709	4,560	7,447
Gibraltar	9,298	13,306	20,136	9,035	10,002	14,242
Malta	9,680	6,496	17,516	51,248	7,816	24,604
Turkey	1,737	6,371	10,071	3,374	8,098	9,184
Egypt	5,760	6,292	15,733	6,163	52,478	108,495
West Coast of Africa	937	8,431	.....	4,023	143,936	7,737
British Possessions in South Africa	26,461	80	280,855	336,560	258,204	157,590
British East Indies	513	.....	691	364	455	.....
Australasia	691	2,068	6,126	3,924	770	65
British North America	1,818	3,397	4,935	3,700	3,000	8,400
Mexico, West Indies, and South America (except Brazil)	53,896	172,208	133,942	93,219	128,008	148,851
Brazil	8,236	4,969	.....	43	.....	7,321
United States of America	.....	.....	8,621	5,393	19,972	5,140
Other countries	27,647	22,848	25,655	4,852	25,914	35,977
Total:						
Ounces	320,360	373,933	607,465	657,924	755,335	626,371
Value (dollars)	409,691.17	490,971.45	790,942.51	846,362.21	977,893.98	820,229.11

Countries from which imported.	Foreign silver coin.					
	1890.	1891.	1892.	1893.	1894.	1895.
	Ounces.	*Ounces.*	*Ounces.*	*Ounces.*	*Ounces.*	*Ounces.*
Russia	48,000	.....	.....	.....	.....	.....
Germany	647,177	29,966	9,447	30,308	26,069	480
Holland	63,742	100	.....	.....	.....	238
Belgium	804,754	77,320	8,286	2,560	4,918	400
France	6,544,259	3,438,844	3,541,371	3,767,089	2,897,759	3,065,540
Portugal, Azores, and Madeira	7,714	7,056	.....	.....	1,825	3,231
Spain and Canaries	12,990	1,728	9,876	14,427	12,700	7,990
Gibraltar	18,224	716	1,985	2,405	1,852	2,768
Malta	692	.....	.....	.....	.....	.....
Turkey	22,105	32,312	2,940	10,784	14,441	.....
Egypt	607,134	20,238	7,653	125,893	112,550	214,043
West Coast of Africa	117,038	14,619	14,924	76,074	336,234	258,017
British Possessions in South America	1,049	741	58,685	15,131	864	17,119
British East Indies	86,875	384,125	623,723	468,248	284,734	69,979
China, including Hongkong	285,074	14,950	.....	.....	.....	2,483
Australasia	454	28,358	12,897	6,315	80	16
British North America	.....	.....	.....	.....	2,960	.....
Mexico, West Indies, and South America (except Brazil)	3,691,034	2,745,055	1,417,518	946,520	376,343	628,258
Brazil	97,743	166,964	302,735	35,775	51,664	20,055
United States of America	5,283,124	9,965,061	12,801,491	9,927,645	7,279,064	5,145,712
Other countries	21,993	49,153	83,094	975,149	3,356,779	89,621
Total:						
Ounces	18,361,175	16,977,306	18,896,625	16,404,323	14,760,836	9,525,950
Value (dollars)	17,605,157.46	15,261,772.25	15,004,027.81	11,821,881.86	8,643,239.79	5,732,133.55

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QUANTITIES AND TOTAL VALUES OF THE REGISTERED IMPORTS OF GOLD AND SILVER COIN AND BULLION INTO GREAT BRITAIN, 1890–1895—Continued.

IMPORTS OF SILVER—Continued.

Countries from which imported.	Silver bullion.					
	1890.	1891.	1892.	1893.	1894.	1895.
	Ounces.	*Ounces.*	*Ounces.*	*Ounces.*	*Ounces.*	*Ounces.*
Germany	2,683,510	4,486,782	4,106,447	2,257,570	1,475,429	1,724,210
Holland		12,666		1,454		
Belgium	1,216,093	1,747,259	3,344,808	2,711,603	2,383,201	1,011,789
France	3,549,486	4,653,957	4,176,142	5,278,383	3,081,444	1,930,785
Portugal, Azores, and Madeira	16,560	965	11,951	8,585		37,070
Spain and Canaries	600,015	302,077	639,377	390,606	199,894	187,629
Gibraltar	1,949	1,758	2,090	2,426	3,058	1,278
Malta					2,560	
Turkey	3,012				144	
Egypt	326,850	107,339	11,105	9,037	5,995	39,329
West Coast of Africa	28,897	160,457	181,370	63,540	58,630	
British Possessions in South Africa	2,220		686	63	10,285	44,206
British East Indies		30,430				
China, including Hongkong	541	250	914,598	1,411		
Australasia	980,700	727,919	1,161,178	1,022,041	1,131,508	875,305
Mexico, West Indies, and South America (except Brazil)	8,905,180	8,434,824	10,063,831	11,598,715	13,937,969	9,548,981
Brazil	51,125	44,169	69,837	16,464	2,630	3,051
United States of America	15,467,640	11,456,397	19,329,460	39,836,307	52,334,343	60,171,570
Other countries	17,221	8,895	458,193	201,608		22,895
Total:						
Ounces	33,850,999	32,176,144	44,471,073	63,400,713	74,627,090	75,598,098
Value (dollars)	32,526,960.89	29,581,613.96	36,502,297.68	45,308,292.69	43,936,728.07	45,371,547.36

Countries from which imported.	Total ounces of silver.					
	1890.	1891.	1892.	1893.	1894.	1895.
	Ounces.	*Ounces.*	*Ounces.*	*Ounces.*	*Ounces.*	*Ounces.*
Russia	48,000					
Germany	3,331,063	4,522,746	4,121,035	2,293,010	1,505,000	1,733,818
Holland	71,326	28,084	15,650	16,387	9,940	6,909
Belgium	2,166,893	1,890,166	3,383,075	2,759,086	2,434,325	1,072,643
France	10,112,449	8,128,831	7,747,254	9,111,268	6,004,990	5,009,202
Portugal, Azores, and Madeira	24,750	8,408	11,951	10,118	8,512	42,489
Spain and Canaries	613,505	307,952	651,924	408,742	217,154	203,066
Gibraltar	29,471	15,780	24,211	13,866	14,912	18,288
Malta	10,372	6,496	17,516	51,248	10,376	24,604
Turkey	26,854	38,683	13,011	14,158	22,683	9,184
Egypt	939,744	133,869	34,491	141,993	171,023	361,867
West Coast of Africa	146,872	183,507	196,294	143,637	538,800	265,754
British Possessions in South Africa	29,730	821	340,226	351,754	269,353	218,915
British East Indies	87,388	414,555	624,414	468,612	285,189	69,979
China, including Hongkong	285,615	15,200	914,598	1,411		2,483
Australasia	981,845	758,345	1,180,201	1,032,280	1,132,358	875,386
British North America	1,818	3,397	4,935	3,700	5,960	8,400
Mexico, West Indies, and South America (except Brazil)	12,650,110	11,352,087	11,615,291	12,638,454	14,442,320	10,326,090
Brazil	157,104	216,102	372,572	52,282	54,294	30,427
United States of America	20,750,764	21,421,458	32,139,572	49,769,345	59,633,379	65,322,422
Other countries	66,861	80,896	566,942	1,181,609	3,382,693	148,493
Total:						
Ounces	52,532,534	49,527,383	63,975,163	80,462,960	90,143,261	85,750,419
Value (dollars)	50,541,809.52	45,334,357.66	52,297,268.00	57,976,536.76	53,557,861.84	51,923,910.12

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QUANTITIES AND TOTAL VALUES OF THE REGISTERED IMPORTS OF GOLD AND SILVER COIN AND BULLION INTO GREAT BRITAIN, 1890–1895—Continued.

IMPORTS OF SILVER—Continued.

Countries from which imported.	Total value of silver.					
	1890.	1891.	1892.	1893.	1894.	1895.
Russia	$46,523.74					
Germany	3,222,644.97	$4,304,579.84	$3,533,950.10	$1,682,285.79	$912,979.73	$1,027,152.69
Holland	74,768.91	31,544.65	20,916.22	20,775.09	12,862.16	9,071.16
Belgium	2,161,962.09	1,761,376.14	2,752,059.28	2,000,554.89	1,463,487.95	688,449.16
France	9,840,140.86	7,432,016.60	6,502,300.98	6,748,867.07	3,568,730.98	2,980,434.39
Portugal, Azores, and Madeira	20,551.23	7,236.49	9,587.01	8,263.32	9,917.93	43,068.53
Spain and Canaries	599,805.86	293,746.81	535,762.72	315,285.94	131,585.29	127,531.50
Gibraltar	29,992.24	20,064.58	30,220.97	15,543.60	16,293.04	21,592.66
Malta	13,689.46	8,754.83	23,257.00	61,240.04	11,314.61	32,936.47
Turkey	26,313.17	37,394.19	14,589.77	12,336.58	19,407.60	11,791.53
Egypt	896,141.64	127,258.98	36,031.57	101,067.47	134,899.38	286,919.11
West Coast of Africa	139,410.63	173,081.94	186,343.15	107,851.37	417,029.85	163,402.47
British Possessions in South Africa	35,262.66	768.91	420,163.88	452,122.18	344,382.74	243,081.68
British East Indies	81,903.20	380,745.23	500,422.20	328,230.83	164,293.04	39,919.90
China, including Hongkong	272,197.94	14,492.44	733,381.55	973.30		1,459.95
Australasia	958,384.18	702,489.01	986,502.81	754,054.44	675,124.68	522,876.23
British North America	2,433.25	4,409.05	6,482.18	3,601.21	7,299.75	10,219.65
Mexico, West Indies, and South America (except Brazil)	12,144,122.02	10,368,783.89	9,441,662.11	9,068,625.42	8,432,481.41	6,233,275.99
Brazil	154,204.79	194,173.35	294,243.19	37,277.39	30,936.34	23,583.06
United States of America	19,746,840.85	19,387,376.83	25,807,662.68	35,371,118.69	35,267,598.50	39,335,554.51
Other countries	74,515.83	84,063.90	461,728.63	886,462.15	1,937,236.86	121,589.48
Total	50,541,809.52	45,334,357.66	52,297,268.00	57,976,536.77	53,557,861.84	51,923,910.12

QUANTITIES AND TOTAL VALUES OF GOLD AND SILVER COIN AND BULLION ENTERED AT THE CUSTOM-HOUSE FOR EXPORTATION TO VARIOUS COUNTRIES, 1890–1895.

EXPORTS OF GOLD.

Countries to which exported.	British gold coin.					
	1890.	1891.	1892.	1893.	1894.	1895.
	Ounces.	*Ounces.*	*Ounces.*	*Ounces.*	*Ounces.*	*Ounces.*
Denmark	2	25,600	7,680	287	97	659
Germany	45,104	810,638	724,226	144,735	1,527	276
Holland	55,161	298,769	1,534	279,741	28,281	883
Belgium	13	35,406	93,817	20,838	79,864	1,024
France	17,821	58,981	155,683	3,788	5,161	12,800
Portugal, Azores, and Madeira	828,086	212,705	11,797	1,245	8	
Spain and Canaries			3		15,750	
Malta	24,407	24,415	33,412	10,276	3,855	30,925
Egypt	206,865	369,822	177,276	161,965	84,764	310,799
West Coast of Africa	8,300	6,950	11,699	10,084	6,395	11,169
British Possessions in South Africa	192,687				60,371	1,443,900
British East Indies	217,900	57,963	12,222	68,547	15,491	88,522
Australasia				482,219		
British North America		7,710		49,049	1,014	1,400
Mexico, West Indies, and South America (except Brazil)	168,450	290,130	245,613	96,484	211,840	661,515
Brazil	308,288	393,280	141,168	100,286	96,132	494,900
United States of America	19,270	215,630	2,570	273,472	8,354	1,028
Other countries	28,174	189,605	40,848	138,566	77,334	221,592
Total:						
Ounces	2,120,528	2,997,604	1,659,548	1,841,582	696,238	3,281,392
Value (dollars)	40,178,451.78	56,813,730.39	31,472,025.35	34,886,308.22	13,214,825.02	62,185,397.42

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QUANTITIES AND TOTAL VALUES OF GOLD AND SILVER COIN AND BULLION ENTERED AT THE CUSTOM-HOUSE FOR EXPORTATION TO VARIOUS COUNTRIES, 1890–1895—Continued.

EXPORTS OF GOLD—Continued.

Countries to which exported.	Foreign gold coin.					
	1890.	1891.	1892.	1893.	1894.	1895.
	Ounces.	*Ounces.*	*Ounces.*	*Ounces.*	*Ounces.*	*Ounces.*
Russia						5,385
Denmark			10,468			16
Germany	304,972	193,654	256,311	135,041	10,746	130,909
Holland		27,350	7	10,558	1,499	13,451
Belgium				11,247	290	
France	120,068	484,987	389,306	94,808	187,821	56,082
Portugal, Azores, and Madeira	17	8	71			
Spain and Canaries			340		5,128	
West Coast of Africa	106	51	341	82	135	186
British Possessions in South Africa			43			
British East Indies		830				
Australasia			220			
Mexico, West Indies, and South America (except Brazil)	13		80	2,616	359	25,632
Brazil	51		538	73		
United States of America	236,144	417,165	31,953	821,910	69,731	244,384
Other countries	398	826	40	2,966	9,888	207
Total:						
Ounces	661,769	1,124,871	689,718	1,079,301	285,597	476,252
Value (dollars)	12,402,664.57	20,999,823.47	12,801,080.06	20,112,587.52	5,343,957.18	8,903,763.00

Countries to which exported.	Gold bullion.					
	1890.	1891.	1892.	1893.	1894.	1895.
	Ounces.	*Ounces.*	*Ounces.*	*Ounces.*	*Ounces.*	*Ounces.*
Russia					4,095	
Denmark			14,866		12,861	
Germany	70,465	596,522	653,126	1,050,353	1,205,300	323,418
Holland	8,136	15,380	18,017	163,211	82,162	80
Belgium		108		1,423	264	
France	74,240	868,209	419,228	101,419	1,308,556	248,095
Portugal, Azores, and Madeira	5,965		38,643	73,171	72,481	39,891
Spain and Canaries	233,515	66,950	246,160	77,408		
West Coast of Africa			2			2
British Possessions in South Africa			30,030	154,845	89,151	256,145
British East Indies	464,064	303,426				
British North America			625			117,911
United States of America	6,120	177,854		419,635		563,942
Other countries			92	10,091	84,721	78,637
Total:						
Ounces	862,505	2,028,449	1,420,789	2,051,556	2,859,591	1,628,121
Value (dollars)	17,042,380.80	39,799,653.15	27,907,416.30	39,908,915.81	57,590,024.74	32,904,649.96

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QUANTITIES AND TOTAL VALUES OF GOLD AND SILVER COIN AND BULLION ENTERED AT THE CUSTOM-HOUSE FOR EXPORTATION TO VARIOUS COUNTRIES, 1890–1895—Continued.

EXPORTS OF GOLD—Continued.

Countries to which exported.	Total ounces of gold.					
	1890.	1891.	1892.	1893.	1894.	1895.
	Ounces.	*Ounces.*	*Ounces.*	*Ounces.*	*Ounces.*	*Ounces.*
Russia					4,095	5,385
Denmark	2	25,600	33,014	287	12,958	675
Germany	420,541	1,600,814	1,633,663	1,330,129	1,217,573	454,603
Holland	63,297	341,499	19,558	453,510	111,942	14,414
Belgium	13	35,514	93,817	33,508	80,418	1,024
France	212,129	1,412,177	964,217	200,015	1,501,538	316,977
Portugal, Azores, and Madeira	834,068	212,713	50,511	74,416	72,489	39,891
Spain and Canaries	233,515	66,950	246,503	77,408	20,878	
Malta	24,407	24,415	33,412	10,276	3,855	30,925
Egypt	206,865	369,822	177,276	161,965	84,764	310,799
West Coast of Africa	8,406	7,001	12,040	10,166	6,530	11,355
British Possessions in South Africa	192,687		45		60,371	1,443,902
British East Indies	681,964	362,219	42,252	223,392	104,642	344,667
Australasia			220	482,219		
British North America		7,710		49,049	1,014	1,400
Mexico, West Indies, and South America (except Brazil)	168,463	290,130	246,318	99,100	212,199	805,058
Brazil	308,339	393,280	141,706	100,359	96,132	494,900
United States of America	261,534	810,649	34,523	1,515,017	78,085	809,354
Other countries	28,572	190,431	40,980	151,623	171,943	300,436
Total:						
Ounces	3,644,802	6,150,924	3,770,055	4,972,439	3,841,426	5,385,765
Value (dollars)	69,623,497.15	117,613,207.01	72,180,521.71	94,907,811.55	76,148,806.94	103,993,810.38

Countries to which exported.	Total value of gold.					
	1890.	1891.	1892.	1893.	1894.	1895.
Russia					$77,804.00	$97,330.00
Denmark	$48.67	$486,650.00	$632,645.00	$5,445.61	245,184.00	12,745.36
Germany	7,951,958.33	30,730,833.07	31,152,821.89	25,272,328.21	23,202,488.97	8,774,474.69
Holland	1,199,981.57	6,458,040.16	371,240.95	8,776,985.81	2,090,405.08	268,557.80
Belgium	248.19	673,679.33	1,781,139.00	629,686.17	1,524,105.07	19,466.00
France	3,956,445.03	26,953,991.09	18,583,990.67	3,826,509.48	31,489,929.21	6,285,401.07
Portugal, Azores, and Madeira	15,800,454.87	4,025,977.59	1,003,306.84	1,485,168.20	1,416,297.50	812,705.50
Spain and Canaries	4,419,122.66	1,304,222.00	4,818,375.18	1,464,524.51	413,652.50	
Malta	462,317.50	462,317.50	632,863.99	194,660.00	72,997.50	585,683.28
Egypt	3,920,452.40	7,007,760.00	3,357,885.00	3,068,328.25	1,605,945.00	5,883,598.50
West Coast of Africa	159,197.81	132,631.59	227,912.79	191,662.24	123,531.24	214,758.65
British Possessions in South Africa	3,649,875.00		837.04		1,143,627.50	27,349,778.67
British East Indies	13,611,313.38	7,299,745.13	844,921.73	4,463,534.33	2,114,104.93	6,900,750.53
Australasia			3,893.20	9,136,367.10		
British North America		145,995.00		924,635.00	19,125.35	26,473.76
Mexico, West Indies, and South America (except Brazil)	3,189,810.69	5,493,675.05	4,664,433.19	1,880,853.59	4,027,924.19	15,469,644.80
Brazil	5,837,921.53	7,444,883.63	2,686,239.87	1,902,090.99	1,826,154.13	9,391,736.69
United States of America	4,923,034.13	15,391,766.20	641,385.23	28,796,540.45	1,459,589.88	16,146,068.83
Other countries	541,315.39	3,601,039.67	776,630.14	2,888,491.61	3,295,880.89	5,754,636.25
Total	69,623,497.15	117,613,207.01	72,180,521.71	94,907,811.55	76,148,806.94	103,993,810.38

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QUANTITIES AND TOTAL VALUES OF GOLD AND SILVER COIN AND BULLION ENTERED AT THE CUSTOM-HOUSE FOR EXPORTATION TO VARIOUS COUNTRIES, 1890–1895—Continued.

EXPORTS OF SILVER.

Countries to which exported.	British silver coin.					
	1890.	1891.	1892.	1893.	1894.	1895.
	Ounces.	*Ounces.*	*Ounces.*	*Ounces.*	*Ounces.*	*Ounces.*
Russia		36				
Denmark						17
Germany		12,711	2,995		1,883	85,539
Holland	818	728	700	437		
France	801	8,565	15,184		363	
Portugal, Azores, and Madeira		6,971	113			
Spain and Canaries		436				
Malta		18,182			54,564	101,836
Egypt				1,820		
West Coast of Africa	612,894	561,836	302,593	731,015	413,138	865,603
British Possessions in South Africa	222,532	38,180		98,172	314,528	192,725
British East Indies		781			24	
Australasia	369,069	255,273	169,290	36,364	18,928	177,453
British North America	88,884	143,967	173,559	88,028	59,692	14,659
Mexico, West Indies, and South America (except Brazil)	486,814	248,834	57,672	313,459	134,421	38,925
Brazil		291				
United States of America		8,845		8,378	377	
Other countries	62,073	37,291	2,098	13,166	14,545	8,578
Total:						
Ounces	1,843,885	1,342,927	724,204	1,290,839	1,012,463	1,485,335
Value (dollars)	2,467,296.04	1,797,724.03	968,842.28	1,727,067.32	1,352,157.03	1,986,656.16

Countries to which exported.	Foreign silver coin.					
	1890.	1891.	1892.	1893.	1894.	1895.
	Ounces.	*Ounces.*	*Ounces.*	*Ounces.*	*Ounces.*	*Ounces.*
Russia	25,358					
Germany	9,657	39,866	15,669	30,450	8,759	27,307
Holland	122,548	348,048	406,944	435,078	295,017	255,665
Belgium	3,120			64,987		
France	1,295,163	1,882,635	551,069	1,093,739	656,388	334,280
Portugal, Azores, and Madeira	23,441	6,484	4,933	31,984	7,620	17,592
Spain and Canaries	20	7,349	5,347	21,912	87	
Malta					3,100	
Egypt			4,300		800	
West Coast of Africa	4,732	7,902	13,161	3,200	41,610	4,016
British Possessions in South Africa			25,908			1,312
British East Indies	5,730,290	7,181,130	12,635,637	10,733,318	6,617,150	5,755,222
China, including Hongkong	1,947,180	1,617,088	1,300,268	1,605,655	2,458,896	2,449,773
Australasia		26,535	1,428			
British North America			306		107,895	
Mexico, West Indies, and South America, (except Brazil)	54,514	54,292	2,131,595	190,050	768,755	553,707
Brazil	20,854	27,717	18,828	39,080	20,164	3,847
United States of America	50,164	9,653	103,100	3,778	14,865	59,524
Other countries	10,507	193,664	14,768	19,567	462,574	220,604
Total:						
Ounces	9,297,548	11,382,363	17,233,261	14,272,798	11,463,080	9,673,849
Value (dollars)	8,520,404.46	10,060,972.90	13,811,297.33	10,310,385.89	6,762,113.68	5,728,488.54

QUANTITIES AND TOTAL VALUES OF GOLD AND SILVER COIN AND BULLION ENTERED AT THE CUSTOM-HOUSE FOR EXPORTATION TO VARIOUS COUNTRIES, 1890–1895—Continued.

EXPORTS OF SILVER—Continued.

Countries to which exported.	Silver bullion.					
	1890.	1891.	1892.	1893.	1894.	1895.
	Ounces.	*Ounces.*	*Ounces.*	*Ounces.*	*Ounces.*	*Ounces.*
Russia	1,600	2,005,758	591,148	1,223,744	185,118	9,493,144
Denmark	.....	.....	175,500	.....	.....	.....
Germany	502,067	1,545,944	1,395,051	5,008,611	5,357,487	1,970,178
Holland	111,306	26,311	52,547	125,961	920,360	64,534
Belgium	6,400	35,807	172,681	33,519	247,489	45,249
France	1,027,181	2,100,610	305,717	1,357,600	3,288,491	12,026,187
Portugal, Azores, and Madeira	1,114,538	3,898,171	2,281,763	119,716	171,847	213,729
Spain and Canaries	1,689,628	16,354,621	2,674,689	.....	.....	.....
Malta	1,000	.....	666	600	15,145	2,072
Egypt	2,255	3,484	35,393	77,089	216,022	75,496
British Possessions in South Africa	.....	.....	.....	123,737	165,330	192,777
British East Indies	33,085,810	20,493,917	41,601,399	44,266,223	39,165,109	26,874,656
China, including Hongkong	462,311	13,000	164,870	14,158,282	22,225,857	13,428,045
Japan	.....	6,454,173	12,327,501	3,688,598	7,374,803	1,350,992
Australasia	714	65	457	325	2,221	.....
Mexico, West Indies, and South America (except Brazil)	.....	50	30,000	322	533,094	1,487,526
Brazil	2,202	.....	.....	.....	.....	.....
United States of America	2,858,918	20,000	.....	.....	.....	.....
Other countries	9,009	15,286	41,533	243,556	946,146	503,749
Total:						
Ounces	40,874,939	52,967,197	61,850,915	70,427,883	80,814,519	67,728,334
Value (dollars)	41,878,957.74	51,702,007.46	53,733,211.56	54,097,040.83	51,086,940.25	42,689,317.59

Countries to which exported.	Total ounces of silver.					
	1890.	1891.	1892.	1893.	1894.	1895.
	Ounces.	*Ounces.*	*Ounces.*	*Ounces.*	*Ounces.*	*Ounces.*
Russia	26,958	2,005,794	591,148	1,223,744	185,118	9,493,144
Denmark	.....	.....	175,500	.....	.....	17
Germany	511,724	1,598,521	1,413,715	5,039,061	5,368,129	2,083,024
Holland	234,672	375,087	460,191	561,476	1,215,377	320,199
Belgium	9,520	35,807	172,681	98,506	247,489	45,249
France	2,323,145	3,991,810	871,970	2,451,339	3,945,242	12,360,467
Portugal, Azores, and Madeira	1,137,979	3,911,626	2,286,809	151,700	179,467	231,321
Spain and Canaries	1,689,648	16,362,406	2,680,036	21,912	87	.....
Malta	1,000	18,182	666	600	72,809	103,908
Egypt	2,255	3,484	39,693	78,909	216,822	75,496
West Coast of Africa	617,626	569,738	315,754	734,215	454,748	869,619
British Possessions in South Africa	222,532	38,180	25,908	221,909	479,858	386,814
British East Indies	38,816,100	27,675,828	54,237,036	54,999,541	45,782,283	32,629,878
China, including Hongkong	2,409,491	1,630,088	1,465,138	15,763,937	24,684,753	15,868,818
Japan	.....	6,454,173	12,327,501	3,688,598	7,374,803	1,350,992
Australasia	369,783	281,873	171,175	36,689	21,149	177,453
British North America	88,884	143,967	173,865	88,028	167,587	14,659
Mexico, West Indies, and South America (except Brazil)	541,328	283,176	2,219,267	503,831	1,436,270	2,080,158
Brazil	23,056	28,008	18,828	39,080	20,164	3,847
United States of America	2,909,082	38,498	103,100	12,156	15,242	59,524
Other countries	81,589	246,241	58,399	276,289	1,423,265	732,931
Total:						
Ounces	52,016,372	65,692,487	79,808,380	85,991,520	93,290,662	78,887,518
Value (dollars)	52,866,658.24	63,560,704.39	68,513,351.17	66,134,494.04	59,201,210.96	50,404,462.29

QUANTITIES AND TOTAL VALUES OF GOLD AND SILVER COIN AND BULLION ENTERED AT THE CUSTOM-HOUSE FOR EXPORTATION TO VARIOUS COUNTRIES, 1890–1895—Continued.

EXPORTS OF SILVER—Continued.

Countries to which exported.	Total value of silver.					
	1890.	1891.	1892.	1893.	1894.	1895.
Russia	$28,858.35	$1,970,981.17	$512,734.44	$955,147.96	$115,311.72	$6,262,747.52
Denmark	.....	.....	155,728.00	.....	.....	24.33
Germany	509,094.30	1,549,070.21	1,294,304.07	3,741,681.52	3,327,975.49	1,342,969.07
Holland	229,056.42	387,266.34	509,532.28	504,154.80	806,106.53	203,093.64
Belgium	11,095.62	35,705.51	150,131.53	71,630.01	152,102.46	28,615.02
France	2,227,586.84	3,701,820.02	736,968.16	1,817,379.83	2,437,449.79	7,093,176.81
Portugal, Azores, and Madeira	1,109,221.35	3,695,469.24	1,926,365.09	113,949.10	110,863.74	145,415.89
Spain and Canaries	1,962,197.13	15,815,492.36	2,330,279.73	19,251.87	97.33	.....
Malta	973.30	24,332.50	486.65	437.99	84,424.04	137,658.69
Egypt	2,214.26	3,406.55	33,311.19	46,596.74	139,571.22	49,346.31
West Coast of Africa	825,703.92	761,977.10	420,674.86	979,631.32	581,561.34	1,161,015.50
British Possessions in South Africa	297,829.80	51,098.25	20,487.97	228,725.50	529,046.95	386,463.36
British East Indies	38,975,866.63	26,690,479.84	45,992,834.05	42,322,923.67	28,878,652.90	20,880,477.42
China, including Hongkong	2,176,493.46	1,373,671.82	1,123,840.31	11,362,776.25	15,335,261.27	9,826,811.52
Japan	.....	6,259,253.37	10,673,207.80	2,959,561.98	4,651,400.76	851,637.50
Australasia	494,713.79	368,457.31	228,199.92	48,903.46	26,721.95	237,485.20
British North America	118,839.93	192,474.94	232,428.91	117,681.70	142,919.37	19,592.53
Mexico, West Indies, and South America (except Brazil)	709,774.16	365,678.54	2,010,258.69	585,328.02	975,202.80	1,271,742.98
Brazil	24,064.84	25,894.65	21,067.08	28,853.48	12,472.84	2,491.65
United States of America	3,061,262.09	41,754.57	88,794.16	14,779.56	10,847.43	37,053.53
Other countries	101,812.05	246,420.10	51,716.28	215,099.28	883,221.09	466,643.82
Total	52,866,658.24	63,560,704.39	68,513,351.17	66,134,494.04	59,201,210.96	50,404,462.29

HAITI.

LEGATION OF THE UNITED STATES,
Port au Prince, February 20, 1896.

SIR: A circular from the Bureau of the Mint has been forwarded to me by the Secretary of State, with instructions to report directly to you in answer to certain interrogatories as to the output and coinage of gold and silver in the countries to which I am accredited.

Neither metal is either mined or coined in Haiti or Santo Domingo. Silver coins are issued under authority of the Haitien Government, but are coined abroad and purchased like any other commodity, and both silver and coinage will probably be included in reports from these countries.

The gold coin used largely in commerce is almost entirely that of the United States.

I am directed to make immediate answers to questions Nos. 12, 13, 14, and 15. To each of these the answer is "None produced."

In regard to other interrogatories, I will say that, so far as I can learn, there is no change since last report.

I have the honor to be, very truly, your friend and servant,

HENRY M. SMYTHE.

The DIRECTOR OF THE MINT, *Washington, D. C.*

HAWAII.

LEGATION OF THE UNITED STATES,
Honolulu, March 5, 1896.

SIR: I have the honor to transmit herewith answers to certain interrogatories propounded by the Treasury Department.

Very respectfully,

ALBERT S. WILLIS.

The DIRECTOR OF THE MINT, *Washington, D. C.*

Replies to interrogatories, 1895.

(1 and 2) Amount of gold and silver coined, recoined, or withdrawn from circulation during 1895, none.
(7) Import of United States gold during the calendar year 1895, $370,225.
(8) Import of United States silver during the calendar year 1895, $3,007; exports, specie, $21,825.
(11, 12, 13, 14, and 15) Amount of United States gold coin deposited at the mints and melted; gold or silver produced from mines of the country during the year, output of gold and silver from refineries, none.
(16) Approximate stock of gold coin and bullion in the country at the close of the calendar year 1895, $4,000,000.
(17) Approximate stock of silver coin and bullion in the country at the close of the calendar year 1895, $1,000,000.
(18, 19, 20, and 21) Amount of Government and bank notes outstanding at the end of the year 1895, none.
(22) Actual currency of the country, gold and silver.
(23) Gold is at a premium of 1 per cent as compared with the actual currency of the country.
(25) No laws were passed during 1895 affecting the coinage, issue, or legal-tender character of the metallic or paper currency.
(26) No report of the operations of the mint is published.

S. M. DAMON,
Minister of Finance.

ITALY.

EMBASSY OF THE UNITED STATES,
Rome, May 9, 1896.

SIR: According to instructions from the Department of State, inclosing a list of interrogatories on the subject of the coinage and production of gold and silver in Italy, I inclose herewith replies which have just been received from the foreign office in answer to these inquiries.

The secretary-general of foreign affairs, in his note transmitting the inclosed replies, states that the "minister of the treasury informs him that answer could not be provided to interrogatories numbered 12 and 13, regarding the producton of gold and silver, as the inspector of mines had not yet calculated the statistics." He, however, adds that "the production of gold and silver in the Kingdom can not have varied in any marked degree from that of preceding years."

I am, sir, your obedient servant,

LARZ ANDERSON, *Secretary of Embassy.*

The DIRECTOR OF THE MINT, *Washington, D. C.*

[Translation.]

Replies to interrogatories, 1895.

(1 and 2) During the year 1895 the Italian mint did not coin any gold or silver currency, limiting its coinage to nickel and copper.
(3 to 6) The Italian Government does not take such statistics as may enable it to answer with sufficient precision the above interrogatories as to the amount of new or old gold and silver used in the industrial arts during the calendar year 1895.
(7) Custom-house statistics report for 1895 as follows:

GOLD.

Description.	Importation.	Exportation.
	Lire.	*Lire.*
Gold material	2,909,000	7,173,000
Gold coins	2,430,000	9,731,000
Total	5,339,000	16,904,000

Besides the custom-house statistics, there are others compiled independently from the former by the ministry of agriculture, industry, and commerce, which, in drawing them up, avails itself of other elements, such as furnished by chambers of commerce, navigation companies, etc. These latter statistics are brought up to the month of October. According to them, raw gold ingots, dust, fragments, and currency imported during the first ten months of the last year amounted to 7,354,996 lire, against an exportation of 14,008,200 lire.

(8) Custom-house statistics report the following to have been the movement of silver between Italy and foreign countries for 1895:

SILVER.

Description.	Importation.	Exportation.
	Lire.	*Lire.*
Silver material	285,000	4,182,000
Silver coins	1,954,000	4,398,000
Total	* 2,239,000	8,580,000

According to statistics of the ministry of agriculture, industry, and commerce, the silver currency imported into Italy during the first ten months of 1895 amounted to 8,679,812 lire, and that exported to 2,866,511 lire.

(9) Elements are wanting to give an answer to this interrogatory. At any rate, United States gold currency imported into Italy in 1895 can only have been in small quantities, as they have no legal course in the Kingdom and can not be comprised in the reserve funds of the banks of issue, except as ingots.

(10) It does not appear that there has been gold imported directly into Italy from the United States.

(11) As it has already been said, there was no gold coined in the Italian mint in the year 1895, nor is any American gold kept in it.

(14 and 15) It is not possible to provide any information as to the output of gold and silver from the refineries of the country, as there are no statistics of the kind taken.

(16) Up to the 31st of December, 1895, the gold owned by the treasury of the State and by the banks of issue amounted, all together, to 519,980,554.92 lire. However, it can not, even approximately, be calculated what amounts of gold were owned at the same date by ordinary banking houses and private parties.

(17) With regard to silver, we must report what has been said for gold as to the amount of it owned by ordinary banking firms and private parties. Up to the 31st of December, 1895, the silver owned by the treasury and by the banks of issue was as follows:

	Lire.
Five-franc pieces	64,434,925
Smaller coins (comprising the reserve for the bank notes)	132,021,663
Erythrean 5-franc pieces	312,200
Erythrean smaller coins	2,375,192
Silver ingots	2,704,881
Total	201,848,861

(18) The circulation for the account of the State was represented up to the 31st of December, 1895, by State bank notes and cash bonds. The following is a prospectus of the issue of State bank notes at that date:

Notes.	Number.	Value.
		Lire.
5-lire	18,814,581	94,072,905
10-lire	24,999,997	249,999,970
25-lire	2,237,085	55,927,125
Total	46,051,663	400,000,000

The bonds of cash, which are covered and guaranteed for the whole value by Italian silver currency of different size, deposited with the "Cassa dei Depositi e Prestiti," amounted, on the 31st of December, 1895, to 110,000,000 lire, divided as follows:

Cash bonds.	Number of pieces.	Value.
		Lire.
1-lire	50,000,000	50,000,000
2-lire	30,000,000	60,000,000
Total	80,000,000	110,000,000

Therefore, on the 31st of December, 1895, the issue for the account of the State amounted altogether to 510,000,000 lire, as follows:

	Lire.
State bank notes	400,000,000
Cash bonds	110,000,000
Total	510,000,000

(19) The banking circulation for the account of the commerce, or that of the treasury (the latter in consequence of advances approved by statute), on the 31st of December, 1895, amounted, for the three banks authorized to issue, to 1,084,817,272.50 lire, as follows:

	Lire.
Bank of Italy	775,507,916.50
Bank of Naples	253,764,208.00
Bank of Sicily	55,545,148.00
Total	1,084,817,272.50

(20) As it has previously been said, the issue of the State up to the 31st of December, 1895, consisted of cash bonds for 110,000,000 lire and of State bank notes for 400,000,000 lire. The former are, in virtue of decrees which authorized their issue, guaranteed by an equal amount of different sized silver currency, expressly deposited with the "Cassa dei Depositi e Prestiti."

For the State notes, the first 320 millions need not by law be covered by silver. The other 80 millions are guaranteed by an apposite reserve, namely, about 60 millions gold currency and 20 millions silver currency. However, all the circulation of the State bank notes is balanced by all the metallic funds of the treasury, which may by law be destined to no other use.

(21) On the 31st of December, 1895, the circulation of the three banks of issue amounted altogether to 1,084,817,272.50 lire, with a metallic reserve of 526,873,230.21 lire. (In this amount is comprised 19,079,050.62 lire in acceptances on the foreign, payable in gold or shares of the Latin Monetary Union, and 5,065,455.05 lire in certificates of ounces deposited in account current in the foreign and payable in gold or shares of the Latin Monetary Union, with the large banks of issue, or with bankers or corresponding banks of the treasury.)

The uncovered circulation, therefore, amounted to 557,944,042.29 lire, against a circulation of 526,873,230.21 lire, entirely guaranteed in currency. It is necessary, therefore, to observe that the reserve possessed on the 31st of December, 1895, by the banks of issue was greater than that which the law obliges them to keep as security of their circulation.

(22) With regard to the paper money circulating in Italy, it is necessary to keep in mind that the distinction between State paper money and banking paper money is made by law of 22d of July, 1894. The change of bank notes of the State was suspended by royal decree of February 21, 1894, No. 50, converted afterwards in Paragraph F of the aforementioned law. Therefore, such State bank notes are inconvertible. Instead, banking paper money, in virtue of article 6 of Paragraph T of the law of 22d of July, 1894, can be changed either into State bank notes or into currency, but in the latter case the banks of issue are entitled to ask of the bearer of the respective bills the payment of the rate of exchange of gold, according to the last prices made by the nearest exchange.

(23) During all the year 1895 gold was quoted at a premium above the paper constituting the circulation in the Kingdom. The average premium per annum was of 554.53 per cent.

(24) The average premium of the exchange on London during 1895, of 554.53 per cent.

(25) According to the provisions already existing, the State could issue—

(*a*) Bills for 110,000,000 lire, on condition that a corresponding reserve of different-sized Italian silver currency should expressly be deposited in the treasury.

(*b*) State bank notes for 800,000,000 lire, whose first 400,000,000 were without special metallic reserve and the other 400,000,000 were with special metallic reserve, deposited in the treasury. Therefore, the State could issue altogether 910,000,000 lire in paper, of which, however, only 150 millions was in currency at the par, deposited in the treasury.

An important change was made to this condition of things with the Articles Nos. 20 and 21, law of August 8, 1895, No. 486. In virtue of such law—

(*a*) The maximum of the limit of the indebtedness of the State in the circulation was reduced from 910,000,000 lire to 800,000,000 lire.

The 110 millions of lire in bills were comprised in the 400 millions in bills of the indebtedness of the State, entirely covered by currency, which the treasury would be authorized to issue besides the uncovered circulation.

(*b*) The circulation to the debit of the State, without special duty of entire or partial metallic covering, is reduced from 400,000,000 lire to 320,000,000 lire, prescribing a deposit with the "Cassa dei Depositi e Prestiti" for 80,000,000 lire in currency, of which at least 60 millions in gold, at security for one-fifth of that circulation, which, according to the foregoing legislation, could fully be uncovered. A copy of the law of August 8, 1895, No. 486, is transmitted.[1]

(26) In view of the little importance of the transactions of the Italian mint, no special report is published in reference to them.

JAPAN.

LEGATION OF THE UNITED STATES,
Tokyo, Japan, May 1, 1896.

SIR: In compliance with an instruction from the honorable Secretary of State, dated February 4, 1896, I inclose herewith a report upon the production of the precious metals in Japan.

I am, sir, your obedient servant,

JOSEPH R. HEROD,
Chargé d'Affaires ad interim.

The DIRECTOR OF THE MINT, *Washington, D. C.*

Replies to interrogatories.

(1) Amount of gold coin minted during calendar year 1895:

	Yen.
5-yen gold coins	1,515,000

NOTE.—Gold coins minted during the last year were of one denomination only, viz, 5-yen gold coins. No gold coin was reminted.

(2) Amount of silver coins minted during the calendar year 1895:

	Yen.
1-yen silver pieces	21,110,000
20-sen silver pieces	1,400,843
10-sen silver pieces	1,372,662
Total	23,883,505

Amount of silver coin reminted:

	Yen.
Japanese silver coin	1,594

NOTE.—No foreign silver coin was reminted during the year.

(3, 4, 5, and 6) The weight and value, and also the kind (new or old), of gold and silver used in the industrial arts is uncertain.

(7) Amount of gold coin and bullion exported during the year 1895:

	Yen (silver).
Japanese gold coin	2,541,171.89
Japanese old gold coin	75.93
Foreign gold coin	250,703.93
Total	2,791,951.75

[1] The material provisions of the law of August 8, 1895, No. 486, are summarized above.

Amount of gold coin and bullion imported during the year:

	Yen.
Foreign gold coin	31.95
Bullion	1,029,880.32
Total	1,029,912.27

(8) Amount of silver coin and bullion exported during the year 1895:

	Yen.
Japanese silver coin	23,587,250.00
Old silver coin	8,858.93
Foreign silver coin	332,563.09
Bullion	581,074.82
Total	24,509,746.89

Amount of silver coin and bullion imported:

	Yen.
Japanese silver coin	2,462,597.50
Foreign silver coin	67,295.96
Bullion	2,314,358.70
Total	4,844,252.16

(9) Amount of United States gold coin imported during the year 1895, $10.

(10) No gold coin or bullion was imported from the United States direct during the year.

(11) No United States gold coin was deposited at the mint bureau and melted during the year 1895.

(12) Amount of gold bullion produced from the imperial household mines in 1895:

Weight	kilograms..	333.936
Value	yen..	400,326.448

Amount of gold bullion produced from private mines in 1893:

Weight	kilograms..	444.259
Value	yen..	390,922.703

NOTE.—The amount of bullion produced from the private mines during 1894 and 1895 is now under investigation, and, as in the case of March of last year, in reply to the interrogatories concerning the amount produced in 1894 the returns for 1892 were given, so, following the same precedent, the returns for the year 1893 are given above. The values given are the commercial values, as is also the case in the replies regarding silver in the next item.

(13) Amount of silver bullion produced from the imperial household mines during the year 1895:

Weight	kilograms..	8,521.085
Value	yen..	327,448.787

Amount of silver bullion produced from private mines during the year 1893:

Weight	kilograms..	58,833.468
Value	yen..	2,336,488.845

(14) The output of pure gold from the refineries of the imperial household during the year 1895 was—

Weight	kilograms..	326.547
Value	yen..	410,430.187

From the refineries of the mint bureau:

Weight	kilograms..	2,067.297
Value	yen..	1,378,211.637

NOTE.—The value of the above output from the imperial household refineries is the commercial value, while that of the mint bureau output is coining value, as is also the case in the replies regarding silver in the next item.

(15) The output of pure silver from the refineries of the imperial household during the year 1895 was:

Weight	kilograms..	12,134.194
Value	yen..	493,893.230

From the mint bureau refineries:

Weight	kilograms..	38,471.772
Value	yen..	1,585,737.280

(16) Approximate stock of gold coin in the country at the close of the calendar year 1895:

	Yen.
Gold coin	12,254,527
Old gold coin	67,289,251
Total	79,543,778

NOTE.—The amount of gold bullion in the country is uncertain, as is also the amount of silver bullion called for in the next item.

(17) Approximate stock of silver coin in the country at the close of the year 1895:

	Yen.
Silver coin	67,940,817
Old silver coin	19,781,387
Total	87,722,204

(18) Amount of Government notes outstanding at the end of the year 1895, 10,995,925.25 yen.

(19) Amount of bank notes outstanding at the end of the year 1895:

	Yen.
Bank notes	20,796,786
Bank of Japan convertible notes	169,922,266

NOTE.—The above amount of Bank of Japan convertible notes is less than the amount of issue by 2,414,549 yen that are deposited in the central treasury, and 8,000,000 yen that are held to cover Government notes and, therefore, not in circulation.

(20 and 21) There are no uncovered Government notes or bank notes outstanding.

(22) The actual currency of the country is gold, silver, nickel, and copper coin, and convertible notes.

(23) Legally, the value of gold and silver coin is the same, but in actual business transactions among the people gold is received and paid for at the current rate of the time—i. e., the average value of 1 gold yen during the year 1895 was 1.897 yen, silver.

(24) The average value of 1 yen, silver, at Yokohama, has been 2s. 1.25+d.

(25) There are no new laws to report in regard to this interrogation.

(26) The annual report of the director of the mint bureau for the year ending March 31, 1895, is forwarded herewith.

KOREA.

LEGATION OF THE UNITED STATES,
Seoul, Korea, March 26, 1896.

SIR: I have the honor to hand you herewith answers to your questions as to the production, coinage, etc., of gold and silver in Korea, as per your blank, which is attached to my report.

I have the honor to be, sir, your obedient servant,

JOHN M. B. SILL.

The DIRECTOR OF THE MINT, *Washington, U. S. A.*

Answers to interrogatories, 1895.

(1 and 2) No gold or silver was coined or recoined.

(3, 4, 5, and 6) No information obtainable as to the amount of gold and silver, old or new, used in the industrial arts during the calendar year 1895.

(7) No imports of gold known to the customs authorities. The declared exports amounted to 35,934.369 ounces, troy weight, at $37.65 (Mexican) per ounce troy, the value being $1,352,929.06 (Mexican). It is believed that the export is actually double this amount, due to smuggling across the border and in passenger luggage.

(8) No import or export of silver declared.

(9, 10, and 11) No import of United States gold coin or bullion and none deposited at the mints or melted.

(12) No reliable information is obtainable as to the production of gold. It is known to be considerable. Three thousand miners were seen at work in a district of 10 miles radius recently by an American mining engineer.

(13) No information obtainable.
(14 and 15) There are no Korean refineries.
(16 and 17) No information obtainable as to the stock of gold and silver coin and bullion in the country.
(18 and 19) There are no Government or bank notes.
(20, 21, and 22) Answered in Nos. 17 and 18.
(23) There is no native currency except copper and nickel.
(24) Follows from foregoing.
(25) No laws were passed during 1895 affecting the coinage, issue, or legal-tender character of the metallic or paper currency.
(26) There is a mint for the coinage of silver, copper, and nickel, but no reports are obtainable.

LIBERIA.

CONSULATE-GENERAL OF THE UNITED STATES,
Monrovia, March 21, 1896.

SIR: I have received, through the Department of State, a printed circular of interrogatories, dated January last, and have been instructed to forward the answers directly to you.

I regret not being able to furnish much of the required information, as there are no mints nor coinage of any metal in the consular precinct; but, in answer to interrogation No. 22, I have to report the actual currency of Liberia was in paper and copper (but not produced in Liberia).

(25) There was a legislative enactment for the coinage and issue of silver and copper currency, but not in Liberia. The law, being an act of the last session of the legislature, has not yet been published. A copy will be transmitted when procured.

I have the honor to be, sir, your obedient servant,

BEVERLY Y. PAYNE,
Vice-Consul-General.

The DIRECTOR OF THE MINT, *Washington, D. C.*

MEXICO.

EXPORTATION OF GOLD AND SILVER DURING THE CALENDAR YEAR 1895.

Description.	Gold.		Silver.	
	Weight.	Value.	Weight.	Value.
	Kilograms.		*Kilograms.*	
Ore	153.643	$103,773	268,289.844	$10,977,079
Mexican coin	128.796	82,884	456,201.130	17,841,570
For fluxing			1,774.166	72,590
In bars	7,285.135	4,920,504	542,057.778	22,178,294
Cyanides	46.240	31,231	358.034	14,649
Sulphides	4.480	3,026	13,576.316	555,475
Total	7,618.294	5,141,418	1,282,257.268	51,639,657

Under regulations now in force gold designed for exportation has an assigned value of $675.417 per kilogram and for coinage is valued at $643.529. Silver for exportation is valued at $40.915 per kilogram and for coinage, $39.109.

PRODUCTION OF GOLD AND SILVER IN MEXICO DURING THE CALENDAR YEAR 1895.

Description.	Gold.		Silver.	
	Weight.	Value.	Weight.	Value.
	Kilograms.		*Kilograms.*	
Coined	783.481	$504,193	634,952.338	$24,832,351
Exported	7,489.495	5,058,534	826,056.138	33,798,087
Total	8,272.976	5,562,727	1,461,008.476	58,630,438

PRODUCTION OF GOLD AND SILVER IN MEXICO, ETC.—Continued.

RECAPITULATION.

Description.	Weight.	Value.
	Kilograms.	
Gold	8,272.979	$5,562,727
Silver	1,461,008.476	58,630,438
Total	1,469,281.455	64,193,165

These amounts do not constitute the total production of gold and silver for 1895, but the above amounts show two of its most important factors. Data necessary for the proper estimates of the quantities of precious metals in the possession of miners and mine owners, as well as the amounts deposited in the banks, the quantities employed in the arts and industries, and the amount which is secretly exported from the country, notwithstanding the precautions taken by the Government to prevent such smuggling, is still wanting.

QUANTITY OF GOLD AND SILVER COINED DURING 1895, BY DENOMINATIONS AND VALUES.

GOLD.

Denominations.	Number of pieces.	Value.
20 dollars	23,317	$466,340
10 dollars	2,633	26,330
5 dollars	142	710
1 dollar	10,813	10,813
Total		504,193

SILVER.

1 dollar	24,610,038	$24,610,038
50 cents	8,000	4,000
10 cents	1,967,310	196,731
5 cents	431,640	21,582
Total		24,832,351

J. STAVOLI.

DEPARTMENT OF THE TREASURY, SEVENTH BUREAU,
March 9, 1896.

MEXICO'S PER CAPITA CIRCULATION.

[From the Mexican Financier, August 29, 1896, page 523.]

A section of the American press has recently been alluding to the small per capita circulation of this country with the object, apparently, of evidencing a low standard of prosperity in a silver-using country. But the estimates of this form of the country's wealth are obviously understated. The New York Journal of Commerce, for example, gives the per capita circulation in all forms as $4.71, a sum which all the leading bankers here whom we have consulted on the subject pronounce to be considerably below the truth. Let us consider this question for a moment in the light of the bank statements on June 30 last, and of certain special features of commercial and financial conditions here which are familiar to long residents but are imperfectly understood abroad.

On June 30 last the eleven banks, whose monthly balances are made public, held in cash and had in circulation in uncovered paper the following amounts:

Banks.	Cash.	Uncovered paper.
National Bank	$28,593,450.71	None.
Bank of London and Mexico	7,093,431.55	$2,408,044.45
International and Mortgage Bank	1,295,730.36	None.
Monte de Piedad	316,855.71	None.
Bank of Nuevo Leon	460,244.01	462,231.99
Chihuahua Mining Bank	560,137.12	528,063.38
Bank of Yucatan	672,821.75	356,684.25
Bank of Zacatecas	491,848.27	.....
Mercantile Bank of Yucatan	983,091.97	.....
Bank of Durango	344,468.95	77,989.05
Commercial Bank of Chihuahua (July 15)	92,188.82	74,254.18
Total	40,904,269.22	3,907,267.30

The above table only includes uncovered notes. The note circulation of the National Bank on the date selected was, for example, $21,250,154, but neither that nor the covered circulation of the other banks is mentioned, only that amount of paper being considered which has been absorbed by the commercial community in excess of the equivalent in silver held by the issuing institution.

Now, anyone at all familiar with business habits in this country knows that the use of the banks for deposit purposes is still far from being general. Even in this city there are many wealthy planters, manufacturers, and mercantile firms carrying always from $200,000 to $500,000 in their countinghouses. On presenting a bill here for $2,000 or more you are quite liable to be paid, not by a check on a bank, or in bank notes, but in hard dollars which are hoisted in "talegas" onto the counter, which you require an expert clerk to count and verify, and a "cargador" or cart to carry home. This undoubtedly involves a great waste of time, is a clumsy and unsatisfactory operation for all parties concerned, and affords a lamentable proof of the limited advantage that is taken of advanced banking and credit facilities. The mechanism of business is greatly hindered by this survival of antiquated methods. They will undoubtedly disappear in time, but at present they illustrate a peculiarity of the commercial community in this country, viz, its propensity to carry large sums in ready money. This propensity is far more pronounced in the interior towns than at the capital. And in this connection it may be remarked that at least 16 of the 30 States and Territories are unprovided with banking facilities, so that the personal holdings there are proportionately higher. Then we have to consider the cash carried by private bankers, on the great haciendas, and in manufacturing establishments, on the mining properties, etc. The amount to be credited to all these holdings is variously estimated. For our part we think it may be safely stated at $60,000,000, of which $10,000,000 are held in this city.

The total of all forms of circulation is thus seen to be as follows:

Cash held by the banks	$41,000,000
Cash in private hands	60,000,000
Uncovered note circulation, say	4,000,000
Total	105,000,000

Distributed among a population of 12,578,861, this amount gives $8.34 per capita; but if we exclude from the population the large proportion of Indians who are not as yet appreciable factors in the great equation of civilization and progress and divide up the above amount among the remaining, say, 6,000,000 active agents in the country's advancement, the per capita circulation figures out at $17.50, a sum which well bears comparison with that of countries figuring in the front rank of civilization.

CURRENCY OF MOROCCO.

The market value of the silver currency of Morocco is so fluctuating and of such a complex character that it is almost impossible to comply with instructions regarding invoices, owing to the spurious and depreciated Spanish money dumped into Morocco, except in pesetas and centimos as now made out, and especially is this the case in the southern part of Morocco, and more particularly at Mogador, where there is a large and increasing export trade with the United States. In a late communication the United States consular agent at that place, Mr. G. Broome, says:

"As I have recently reported, this district has become the sink for the base and

worn-out silver coins, mostly of Spanish denomination, imported from the north in exchange for the best of the old coins."

There is no other currency than silver, which may be grouped under two heads—Spanish and Moorish, the former being much more largely in circulation than the latter and consisting mostly of pesetas. Next in volume is the contraband "Filipine" half dollar and peseta; next to that the "Isabella" dollar, and then the "Alphonso," the latter used only to pay customs dues on exports. Moorish coins are those minted for the Government some years ago in France, and contain a large percentage of alloy, and their actual value as silver is not known. Invoices of consignors to the United States are correctly made out at the market value of the merchandise shipped, but the invoices do not show in what coin the purchases were made, and, in consequence, the exact value of the merchandise can not be stated in the certified invoices in standard currency unless the peseta be taken as a standard.

The difficulty is that there is no standard of currency, the various coins of even the same denomination bearing different market values. For example, a person wanting to make a remittance to London would buy a bill of exchange on a consignment to New York or Philadelphia, for the value of which a draft would be made on London in pounds sterling, and if the coin paid was in "Alphonso" dollars the drawer of the draft would receive 22 per cent; if paid for in pesetas with two or three holes in them, 40 to 42 per cent. Then, as regards Moorish coin, the current or market value differs materially from the Government value, which I suppose ought to be the standard of coin currency of the country of export. Custom-house dues are calculated at 40 okeas the dollar (3 okeas=2 American cents) in either Moorish or "Alphonso" coins, whereas the market value is about one-third the fixed Government value—that is to say, the Government issues its dollars at a nominal value of 125 okeas, but will only receive the same for duties at 40 okeas.

Some years ago the late Sultan had $4,000,000 minted in France, but those coins contain a large percentage of alloy; consequently, they can not be shipped to Europe without a loss of at least 50 per cent.

The United States has proved to be a better market than Europe by from 10 to 15 per cent for the following products from Morocco, viz, goatskins, olive oil, almonds, beeswax, and gum sandarac. On imported articles of merchandise, nearly all of which come from England, France, and Germany, there is a profit of from 10 to 15 per cent over and above the cost of bills of exchange, thus enabling buyers of the said products from European markets to pay that much more than they are worth; indeed, they are almost compelled to do so on account of the impossibility of making specie remittances for imports. Numerous proclamations have been made by the Sultan to prevent the importation of "Filipine" coins, with the usual result of failure, and it is evident that some privileged parties have the monopoly, as they are more in evidence in southern Morocco than ever. These are Spanish coins, worth as silver about 29½ per cent in United States silver currency, and for reasons already explained they will soon become the only coin in circulation. The only feasible and safe way to prevent this would be to induce the Moorish Government to supply the country with a silver coinage. This country has no national debt, and a loan could be secured on customs dues, as the last and only loan this Government had from England (in 1859) was effected. If a good silver currency could be secured, I am satisfied that trade with the United States would be largely increased.

J. JUDSON BARCLAY,
Consul-General.

TANGIER, *February 26, 1896.*

NETHERLANDS.

LEGATION OF THE UNITED STATES,
The Hague, May 25, 1896.

The envoy extraordinary and minister plenipotentiary of the United States presents his compliments to the Director of the Mint, and, in accordance with instruction contained in Department of State circular dispatch, dated February 4, 1896, transmits herewith a report relating to the coinage and currency of the Netherlands in the calendar year 1895.

Replies to interrogatories, 1895.

(1) There were coined in the Netherlands in 1895, gold, 149 10-guilder pieces, to the value of 1,490 florins ($598.98); 58,444 ducats (negotiable coins), worth 5.75 florins ($2.30) each, to the total value of 336,053 florins ($135,093.30). For these purposes there were employed, in addition to bar gold, 108 10-guilder pieces and 84 kilograms of eagles.

(2) There were coined, silver, 1,200,000 pieces of 25 Dutch cents, to the value of 250,000 florins ($100,500), and 1,000,000 pieces of 10 Dutch cents, to the value of 100,000 florins ($40,200). To this end there were employed 213,603 florins of Netherlands standard coin; 201,692 florins of worn small coin.

(3 and 5) At the various security bureaus 752 kilograms of new gold works and 10,476 kilograms of new silver works were presented for registration and stamping. The quality of these articles varied, of course. The actual value thereof may be estimated at 752,000 florins ($302,304) of gold articles and 424,000 florins ($170,448) of silver articles.

(4 and 6) What amount of new and old gold and silver was used in the industrial arts can not be stated.

(7 and 8) Import and export of gold and silver:

GOLD.

Description.	Import.		Export.	
	Florins.		*Florins.*	
Gold ore	27,770	$10,063.50	31,340	$12,598.60
Gold dust	8,300	3,366.60	.....	.....
Gold in staves, bars, and lumps	467,425	187,904.80	168,521	67,745.40
Gold coin	2,941,778	1,182,594.70	559,154	224,779.90
Total	3,445,273	1,383,929.60	759,015	305,123.90

SILVER.

Silver ore	1,065,783	$428,444.70	.....	.....
Silver in staves, bars, and lumps	297,166	119,460.70	.....	.....
Silver coin	1,443,902	580,448.60	55,499	$22,310.50
Total	2,806,851	1,128,354.00	55,499	22,310.50

(9 and 10) The total import of gold and United States gold coin during the year can not be stated.

(11) Nihil. (Amount of United States gold coin deposited at the mints and melted.) The 84 kilograms mentioned in answer No. 1 were not melted at the royal mint.

(12, 13, 14, and 15) There are neither gold nor silver mines in the Netherlands.

(16) Approximate stock of gold coin and bullion in the country at the close of 1895: 47,581,430 florins ($19,127,734) in 10-guilder pieces, of which 23,928,570 florins ($9,619,285) was at the Bank of the Netherlands, while there was at that bank in coinable gold to the value 19,063,841 florins ($7,663,664).

(17) Approximate stock of silver coin and bullion in the country at the close of 1895: 131,509,735 florins ($52,866,913) in standard silver coin, and 8,174,781 florins ($3,286,262) in silver bullion. Of this there was about 82,160,000 florins ($33,029,124) at the Bank of the Netherlands.

(18) Government notes outstanding at the end of 1895: 15,000,000 florins ($6,030,000).

(19) Bank notes outstanding at the end of 1895: 206,084,405 florins ($82,845,930).

(20) Uncovered Government notes, nihil.

(21) Uncovered bank notes: On the 31st of December, 1895, there were bank notes in circulation to the value of 206,084,405 florins ($82,845,930), while at the Bank of the Netherlands there was:

Items.	Value.	
	Florins.	
In gold coin	23,928,570	$9,619,285
In coinable gold	19,063,841	7,663,664
In silver and copper coin	82,162,615	33,029,371
Total	125,155,026	50,312,320

In virtue of article 16 of the provision of the law relating to banks, the ratio in which the amount of bank notes, bank assignations, and current-account balances shall be covered by coin or coinable material is fixed at two-fifths.

Items.	Value.	
	Florins.	
Amount of bank notes	206,084,405	$82,845,930
Amount of bank assignations	1,305,605	524,853
Amount of current-account balances	6,903,798	2,775,327
Total	214,293,808	86,146,110

The available balance, 125,155,026 florins ($50,312,320), exceeded the balance required by legal provision, viz, two-fifths of 214,293,808 florins ($86,146,110), or 85,717,523 florins ($34,458,444), by 39,437,503 florins ($15,853,876).

(22) Actual currency of the country is gold and silver standard coin; the mint is, however, closed for the making of the latter.

(23) Gold is not at a premium as compared with the actual currency of the country.

(24) Average rate of exchange on London: No check is kept with regard hereto at the department of finance.

(25) No laws were passed during 1895 affecting the coinage, issue, or legal-tender character of the metallic or paper currency.

(26) A report is annually sent to the Director of the Mint at Washington.

[From "Jaarcijfers uitgegeven door de Centrale Commissie voor de Statistiek. Binnenland. 1895 en vorige jaaren," page 175.]

I.—STOCK OF SPECIE IN THE COUNTRY.

	Gold.	Silver.	Pieces of—	
			25 cents.	10 cents.
	Florins.	*Florins.*	*Florins.*	*Florins.*
January 1, 1895	47,581,020	131,706,339	3,585,609	4,118,713
Coined in 1895	1,490	.....	300,000	100,000
Imported in 1895	.....	67,000	.....	.....
Total	47,582,510	131,773,339	3,885,609	4,218,713
Recoined in 1895	1,080	213,605	173,474	28,209
Exported in 1895	.....	50,000	.....	.....
Total January 1, 1896	47,581,430	131,509,734	3,712,135	4,190,504

	Pieces of—			
	5 cents.	2½ cents.	1 cent.	½ cent.
	Florins.	*Florins.*	*Florins.*	*Florins.*
January 1, 1895	247,142	515,000	1,230,500	206,500
Coined in 1895	.....	.....	.....	.....
Imported in 1895	.....	.....	.....	.....
Total	247,142	515,000	1,230,500	206,500
Recoined in 1895	.....	.....	.....	.....
Exported in 1895	.....	.....	.....	.....
Total January 1, 1896	247,142	515,000	1,230,500	206,500

II.—RECAPITULATION.

PRESUMPTIVE QUANTITY OF SPECIE AT THE BEGINNING OF THE YEAR.

	1890.	1891.	1892.	1893.
Gold:	*Florins.*	*Florins.*	*Florins.*	*Florins.*
10-florin pieces	47,598,000	47,594,000	47,591,000	47,589,000
Silver:				
2½, 1, and ½ florin pieces	124,269,000	116,712,000	127,046,000	132,976,000
Divisional coin	7,634,000	7,616,000	7,596,000	7,716,000
Bronze:				
Divisional coin	1,783,000	1,833,000	1,858,000	1,908,000
Total	181,284,000	173,755,000	184,091,000	190,189,000

	1894.	1895.	1896.
Gold:	*Florins.*	*Florins.*	*Florins.*
10-florin pieces	47,581,000	47,581,000	47,581,000
Silver:			
2½, 1, and ½ florin pieces	132,756,000	131,706,000	131,510,000
Divisional coin	7,825,000	7,951,000	8,150,000
Bronze:			
Divisional coin	1,903,000	1,953,000	1,953,000
Total	190,065,000	189,191,000	189,194,000

III.—MONETARY CIRCULATION EXCLUSIVE OF THE STOCK IN THE BANK.

Years.	Silver coins.	Gold coins.	Paper money.	Bank notes.	Total.	Of which amount were gold or notes represented by gold in the bank.
January 1—	*Florins.*	*Florins.*	*Florins.*	*Florins.*	*Florins.*	*Florins.*
1876	89,919,000	16,428,000	6,980,000	189,228,000	302,555,000	*a* 92,666,000
1881	70,758,000	31,921,000	6,525,000	197,975,000	307,179,000	88,845,000
1887	62,238,000	24,204,000	14,071,000	213,130,000	313,643,000	90,778,000
1888	61,715,000	24,098,000	12,823,000	200,608,000	299,244,000	72,708,000
1889	60,337,000	24,437,000	11,737,000	207,233,000	303,744,000	85,477,000
1890	60,985,000	24,366,000	11,577,000	213,810,000	310,738,000	85,075,000
1891	60,544,000	24,255,000	14,486,000	204,940,000	303,225,000	63,492,000
1892	57,649,000	24,056,000	14,750,000	203,288,000	299,743,000	62,244,000
1893	53,995,000	23,773,000	13,960,000	197,547,000	289,275,000	61,822,000
1894	58,153,000	23,594,000	14,347,000	201,809,000	297,903,000	68,625,000
1895	58,888,000	23,671,000	14,534,000	202,943,000	300,036,000	72,737,000
1896	57,420,000	23,654,000	14,579,000	209,817,000	305,470,000	59,764,000

a The law, in virtue of which were coined the gold pieces, date of June 6, 1875.

NORWAY.

LEGATION OF THE UNITED STATES,
Stockholm, March 14, 1896.

SIR: In view of the instructions of the Secretary of State, of February 4, 1896, I have the honor to transmit herewith the answers to interrogatories 12, 13, 14, and 15 of the Treasury Department, Bureau of the Mint, of January, 1896. These have been received from the minister of finance of Norway, through the kindness of the minister of foreign affairs, who promises me as soon as possible the responses to these interrogatories in reference to Sweden, and also, later, the answers to the other questions for both Kingdoms.

I have the honor to be, sir, very respectfully, yours,

T. B. FERGUSON.

DIRECTOR OF THE MINT, *Washington, D. C.*

[Translation.]

Answers to interrogatories 12, 13, 14, and 15, of the Treasury Department of the United States, January, 1896, with regard to Norway:

(12 and 14) There is no information to be obtained on the production of gold in 1895 in the Kingdom. It is supposed, however, to have been rather insignificant.

(13 and 15) At the Kongsberg Silver Works argentiferous ores have been extracted, from July 1, 1894, to June 30, 1895, containing an estimated amount of 6,081.9 kilos of fine silver.

The production of the smelting house for the same period amounted to 4,956.2 kilos of fine silver, which, when sold, was realized for kronor 383,192.63.

As far as is known, there has been no regular mining of any importance at the other mines.

NORWAY.

LEGATION OF THE UNITED STATES,
Stockholm, June 3, 1896.

SIR: Referring to my letter of March 14, 1896, I have the honor to inclose herewith the additional answers to inquiries which have this day been received through the kindness of the minister of foreign affairs for both the Kingdoms of Sweden and Norway, together with the inclosures enumerated below. I have had the reports translated, and take the liberty of appending the translations with the originals.

I have the honor to be, sir, very respectfully, yours,

T. B. FERGUSON,
United States Minister.

DIRECTOR OF THE MINT, *Washington, D. C.*

[Translation.]

Replies to interrogatories, 1895.

(1) No coining of gold has taken place in the year of 1895.

(2) Of silver there has been coined 300,000 kronor in the same year, viz., 50,000 kronor in pieces of 2 kronor, 100,000 kronor in pieces of 1 krona, 100,000 kronor in pieces of 50 öre, and 50,000 kronor in pieces of 10 öre. At this coining old Norwegian coin at a total amount of 40,500 kronor was recoined; no foreign coins have been used for bullion.

(3 to 6) There is no possibility of giving information on the weight and value of the gold and silver which has been used in the trades during the course of the year.

(7 to 8) According to the statistic reports there has been in 1895 an import of gold and silver in bars and coin at a value of 2,649,700 kronor, and an export of silver coin at a value of 324,000 kronor. These numbers, however, are not considered to be absolutely correct.

(9 to 11) No information can be given on the import of gold and of gold coin from the United States during the course of the year, nor of the smelting of such coin.

(16 and 17) The metal cash of the Bank of Norway kept in the Kingdom at the close of 1895 amounted to about 28,095,600 kronor, exclusively in gold. Up to that date there has been a coinage of gold coin at a total of 15,860,670 kronor, of which 2,180 kronor have been called in as worn or broken. Of small silver coin there was an amount of 7,569,050 kronor for circulation, of which 574,320 kronor were kept in the chief cash on December 31, 1895.

(18 to 21) An amount of 50,970,400 kronor of the notes of the Bank of Norway were circulating on December 31, 1895, of which there were 14,210,900 kronor beyond the metallic balance. The State doesnot issue any notes.

(22 and 23) The present metallic standard of the Kingdom is gold. The monetary unit is 1 krona, the value of which corresponds to a weight of $\frac{31}{62}$ or 0.40323 of a gram of fine gold.

(24) The average rate of the London Exchange has been 18 kronor 16½ öre per pound sterling.

(25) In 1895 a law has been issued of July 20, containing regulations on the conditions of cashing small coin which has been forcibly or unlawfully damaged. We take the liberty of appending a copy of the department's circular issued upon this occasion on August 27, 1895, which also contains a copy of the text of the above-mentioned law.

The royal resolution of September 27, 1895, has further settled the future appearance of pieces of 25 öre to be as follows:

(A) The right side: The Norwegian royal arms surrounded by a wreath of oak leaves, open at the top, in which the crowned monogram of His Royal Majesty, in Anglo-Saxon letters, is interlaced on both sides of the escutcheon, and over the royal arms His Majesty's motto: "The Welfare of the Brother Nations."

(B) The reverse: "25" in big numbers with the value of öre beneath the same in the center of the reverse, surrounded by a wreath of oak leaves, open at the top, beneath which the date of the year and the stamp of the mint is placed.

(26) A copy of the Storthing Proposition No. 1, for 1896, is annexed, item 8, chapter 6, in which a report will be found on the management of the State mint of Kongsberg in the period from July 1, 1894, to June 30, 1895.

CHRISTIANIA, *May 21, 1896.*

PARAGUAY.

LEGATION OF THE UNITED STATES,
Montevideo, May 11, 1896.

SIR: Referring to your No. —, dated February 4, 1896, inclosing copies of circular in reference to the financial affairs of Paraguay and Uruguay, and to my note of March 9, 1896, I herewith inclose copy of replies from Vice-Consul Flagg of Asuncion, Paraguay, to my note on the subject.

Dr. Flagg is very prompt, and a most satisfactory correspondent.

I have, etc.,

GRANVILLE STUART.

Hon. RICHARD OLNEY,
Secretary of State, Washington, D. C.

ASUNCION, PARAGUAY, *April 10, 1896.*

SIR: Your favor of March 9, inclosing list of questions to be answered for the Director of the Mint, is at hand. The report must, however, necessarily be meager, owing to the absence of reliable statistics relating to many of the questions. If these reports are required every year, the bureau of statistics can introduce the line of inquiries on which the circular treats.

Replies to interrogatories, 1895.

(1 and 2) There is not now, nor ever has been, a mint in the Republic of Paraguay; therefore no gold has been coined.

(3) Fine gold is very rarely used here in the industrial arts, and there are no establishments devoted entirely to gold refining.

(4) Gold scrap is generally bought by the jewelers, and coins of other nations melted indiscriminately, but no statistics are available as to the exact amount. Jewelers are not obliged by law to keep or render account of their meltings of gold.

(5 and 6) The same as to silver.

(7) The import and export of gold during the calendar year 1895 has been nothing, or next to nothing. Import and export business has been done upon a gold basis, but the exchange has been accomplished by means of credits and without the handling of either gold or silver.

(8) Same answer as to silver.

(9) The writer has a standing engagement with money changers and others for information of the arrival of United States gold coins, and during 1895 did not hear of more than $175 worth, mostly double eagles.

(10) There were no arrivals of bullion from the United States.

(11) As there is no mint, no coins of the United States have been melted from that source.

(12) There are no gold mines at present worked in the country, nor ever have been, though their existence is confidently asserted.

(13) There is no claim put forward to the existence of silver mines.

(14 and 15) No refineries of gold or silver.

(16) The stock of gold in existence in this country is impossible to gauge. Much is hoarded; much has been buried and never unearthed, owing to loss of the records incident to the late war and consequent condition of society.

(17) The same may be said about silver.
(18) There are no Government nor (as we understand it) treasury notes in Paraguay—only Government bonds. These are mostly held in England, and at present, with interest, amount to £941,140.
(19) Bank notes exist to the amount of $5,000,000, all outstanding. Their present value in gold coin is about $800,000.
(20 and 21) If by "covered" is meant balance in the treasury to secure redemption, would say that such balance does not exist in Paraguay, either to cover Government obligations or bank notes.
(22) The actual currency of the country is inconvertible paper. Paraguay, for certain reasons, never had a gold coin nor silver till about seven years ago, when a number of silver coins were struck off in Buenos Ayres for the Bank of Paraguay and Rio de la Plata, amounting to 618,893 pieces of $1 each, carrying the arms of Paraguay. This bank is now in liquidation.
(23) The gold premium during 1895 varied 625 per cent.
(24) Exchange on London about 630 per cent.
(25) There were no laws passed during the year relative to paper money.
(26) There being no mint, there can be no report of one.

Your obedient servant,

EBEN M. FLAGG,
United States Vice-Consul.

Hon. GRANVILLE STUART,
United States Minister, Montevideo, Paraguay.

PERSIA.

LEGATION OF THE UNITED STATES,
Teheran, April 25, 1896.

SIR: In compliance with instructions contained in a circular letter from the Secretary of State, dated February 4, 1896, inclosing certain questions concerning the financial position of foreign countries, I regret to observe that, so far as Persia is concerned, I can provide but very little reliable information on the subject. The Persian Government has not yet come to appreciate the value of statistics; consequently none of an authentic nature are collected, and in nearly every case, were I to answer the interrogations by figures, I should have to do it with a more or less unsatisfactory assumption, which would be entirely misleading.

Interrogatories from 1 to 11, inclusive, are practically outside any knowledge possessed either by Europeans or Persians.

In regard to 12 and 13, so far as is known no gold was produced from the mines (supposing such to exist) during the year 1896. As no systematic account is kept of the gold passing through the refineries, questions 14 and 15 are unanswerable.

No possible answer can be given to Nos. 16 and 17.

No satisfactory answer can be given to questions 18, 19, and 20.

The Persian Government has no issue of bank notes.

As to the interrogatory 21, it may be stated that the notes issued by the Imperial Bank of Persia fluctuate very considerably in the amount current, but they are circulated, with a 30 per cent reserve, to the amount of the subscribed capital.

No answer can be given to No. 22.

In reply to No. 23, it may be stated with considerable accuracy that the average premium of gold during 1895 was about 90 per cent.

(24) The average rate of exchange on London for 1895 was 52 krans per larin. This is probably the highest rate ever known.

The answers to 25 and 26 are simply negatives.

I remain, sir, your most obedient servant,

ALEX. MCDONALD, *United States Minister.*

The DIRECTOR OF THE MINT, *Washington, D. C.*

PERU.

UNITED STATES LEGATION,
Lima, April 11, 1896.

SIR: In compliance with the instructions of the Department of State in its circular of February 4, 1896, I have the honor to submit herewith a report forwarded through the foreign office, with a copy of an official publication entitled Boletin de

Minas, which contains some information in regard to the production of the precious metals in Peru.

I have the honor to be, sir, your obedient servant,

J. A. McKENZIE.

The DIRECTOR OF THE MINT, *Washington, D. C.*

[Translation.]

MINISTRY FOR FOREIGN RELATIONS,
Lima, March 30, 1896.

Señor DIRECTOR OF PUBLIC WORKS, ETC.:

The annual statistics of the mint regarding coinage is published in the Boletin de Minas No. 1, of February 29, 1896, which has been furnished to the school of mines by order of this department. The five inclosed statements answer the interrogatories numbered 2, 5, 6, 7, 8, 12, and 13—amount of silver coined, number of bars, gross weight, fineness of the metal and legal value, amount coined in soles and in sucres, and exportation of gold and silver.

The interrogatories numbered 1, 9, 10, and 11 do not apply to Peru. No gold coins (gold having been demonetized), and no coinage of this metal was made during the year.

(18 to 22) Government notes and bank notes have been abolished, and no other money is in circulation than the silver sol of 9 decimos fine by law and 25 gramos weight, with the respective decimal fractions.

(23 and 24) Premium on the American gold money and the rate of commercial exchange on London has been at 100 per cent on the first and 24 pence at ninety days' sight on the second during the present year, with a slight fluctuation.

(25) In the last legislature no laws were passed respecting coinage or issue of money.

All of which I present for your information.

A. ESPINOZA.

MOVEMENT OF THE MINT AT LIMA DURING THE YEAR 1895.

[Translation. From the Boletin de Minas, Industria y Construcciones, Lima, February 29, 1896.]

From the tables which are inserted in continuation herewith, obtained from the national mint of Lima, we extract the following general results:

1. The number of bars of silver received into the mint for coinage during 1895 was 1,975, with a gross weight of 104,321.913 kilograms, which corresponds to 98,387.734714 kilograms of fine silver, whose value according to the legal rate is 4,372,785.36 soles. (Table No. 1.)

2. The number of bars exported by the same mint was only two, with the gross weight of 12.983 kilograms, or 12.97017 kilograms of fine silver, amounting in value to 576.44 soles. (Table No. 2.)

The sum of the previous quantities added makes the total amount registered at the mint 1,977 bars, with a gross weight of 104,334.896 kilograms, or 98,400.704731 kilograms of fine silver, which represents a value of 4,373,361.80 soles.

It will be noted that by comparing these quantities with the corresponding amounts for 1894 there was a decrease in 1895 of 45 bars and 2,294.306269 kilograms of fine silver, of the value of 101,943.06 soles.

By virtue of the supreme resolution of January 9, 1895, to lighten the tax of exportation on gold and on silver coin and bullion there is, in consequence, no record in the mint of the number of bars of silver exported from January to August of the said year, and therefore the consignments in table No. 2 represent only the export in the months which are indicated in it.

3. In 1895 there were coined in silver (hard soles and fractional coins) 4,150,965.51 soles. Besides, there was coined in sucres (fuertes and quintos) 205,473.40, which gives the total value of the coinage as 4,356,438.91 soles. (Tables Nos. 3 and 4.) In 1895 the coinage, therefore, was less than that of the year last past.

With respect to the gold exported (table No. 5), which is shown to be 71 bars, with the gross weight of 124.392 kilograms, which corresponds to 96.471225 kilograms, fine, the value of which is 66,457.67 soles, you will observe that said exportation is reported as only a part of the precious metal exploited or produced, owing to its employment in the country as well as the facility of clandestine exportation of a merchandise which bears such little weight and such great value. Upon the other hand, as before mentioned, the lightening of the tax of exportation upon the

gold from January up to June 20, 1895, there is no record of the quantity of said metal exported.

We here give the tables to which we have alluded:

TABLE NO. 1.—DEPOSITS OF SILVER BARS FOR COINAGE.

Months.	Number of bars.	Gross weight.	Fine weight.	Value.
		Kilograms.	*Kilograms.*	*Soles.*
January	99	4,736.687	4,215.282207	187,345.69
February	59	2,574.563	1,936.318093	86,058.45
March	226	11,848.738	11,516.597638	511,848.60
April	309	16,554.434	14,713.446510	653,930.61
May	185	11,009.835	9,915.445123	440,686.09
June	174	9,479.747	9,221.846791	409,859.61
July	167	8,591.683	8,366.206146	371,831.19
August	163	8,626.781	8,360.123676	371,560.81
September	141	7,204.614	7,050.707814	313,364.58
October	147	7,507.590	7,349.415072	326,640.40
November	141	7,317.161	7,116.856095	316,304.47
December	164	8,870.180	8,625.489549	383,354.86
Total	1,975	104,322.013	98,387.734714	4,372,785.36

TABLE NO. 2.—EXPORTATION OF SILVER BARS.

Months.	Number of bars.	Gross weight.	Fine weight.	Value.
		Kilograms.	*Kilograms.*	*Soles.*
January				
February				
March				
April				
May				
June				
July				
August				
September	1	6.248	6.241752	277.41
October				
November	1	6.735	6.728265	299.03
December				
Total	2	12.983	12.969017	576.44

TABLE NO. 3.—COINAGE OF SOLES AND FRACTIONAL COINS.

Months.	Soles.	Quintos (fifths).	Dineros.	Medio dineros.	Total.
					Soles.
January	208,026.28			4,650.00	212,676.28
February	154,349.71	600.00	2,003.48	455.44	157,408.63
March	312,600.00	2,946.20			315,546.20
April	368,000.00				368,000.00
May	522,000.00				522,000.00
June	491,000.00		1,000.00		492,000.00
July	432,000.00		819.88	3,000.00	435,819.88
August	333,000.00		172.14		333,172.14
September	311,000.00			2,000.00	313,000.00
October	354,000.00		3,000.00	9,078.69	366,078.69
November	340,000.00	6,331.53	2,000.00		348,331.53
December	285,000.00			1,932.16	286,932.16
Total	4,110,975.99	9,877.73	8,995.50	21,116.29	4,150,965.51

TABLE NO. 4.—COINAGE OF SUCRES AND FRACTIONAL COINS.

Months.	Sucres.	Quintos (fifths).	Decimos (tenths).	Vigesimos (twentieths.)	Total.
					Soles.
January					
February		10,872.98			10,872.98
March					
April					
May	34,445.18				34,445.18
June	55,563.00				55,563.00
July	20,100.00				20,100.00
August	51,494.38				51,494.38
September	6,000.00	7,015.91			13,015.91
October	4,670.00				4,670.00
November	1,125.00	5,215.81			6,340.81
December		8,971.14			8,971.14
Total	173,397.56	32,075.84			205,473.40

TABLE NO. 5.—MEMORANDUM OF GOLD BARS EXPORTED, AND VALUE OF THE DUTIES ON THE EXPORTATION OF BOTH GOLD AND SILVER.

Months.	Number of bars.	Gross weight.	Fine weight.	Value.	Duty on all exported.
		Kilograms.	*Kilograms.*	*Soles.*	*Soles.*
January	3	4.708	3.203898	2,207.11	66.20
February					
March					
April					
May					
June	1	1.489	1.487511	1,024.72	30.74
July	11	17.308	12.433787	8,565.45	256.93
August	13	29.129	22.611253	15,576.61	467.25
September	7	13.670	9.924897	6,837.11	213.41
October	8	22.573	18.724840	12,899.30	386.96
November	8	16.285	12.645064	8,711.00	270.27
December	20	19.230	15.439975	10,636.37	319.05
Total	71	124.392	96.471225	66,457.67	2,010.81

PUERTO RICO.

CONSULATE OF THE UNITED STATES,
San Juan de Puerto Rico, December 10, 1895.

SIR: I have the honor to inclose herewith an "extraordinary" copy of the Official Gazette of Puerto Rico, together with a translation of the same, in reference to the long mooted exchange of the Mexican silver money now current in this island for a new money. The details of the plan of exchange have been kept secret up to the time of this publication, on the 8th of December.

The new money is provincial in its character, but it is in all other respects the same as the coin now circulating in Spain, except that it is coined for Puerto Rico and will not be taken in circulation, at least for the present, in Spain or her dominions.

It is only contemplated by this decree at present to refund the whole dollar—Mexican—and not the fractional Mexican money. This latter money, together with whatever foreign fractional money there is in circulation, will probably be supplanted as soon as enough Mexican dollars are withdrawn from circulation to furnish material for the coinage of the new fractional pieces. These pieces are to be of the same fineness and denomination as those now circulating in Spain, only as above excepted.

The bulk of the 5 and 10 cent pieces in circulation are United States coin of these denominations, badly mutilated; therefore it may be interesting to learn what has become of a certain amount—an amount not easily estimated—of bad United States coin.

There is a considerable seigniorage resulting from the recoinage of the Mexican money into the new coin, and it is provided, after paying all the expenses attendant upon the exchange, that the residue of this seigniorage shall be converted into gold coin, and placed in circulation at the stated premium of 20 per cent. That it will remain in circulation is hardly to be considered. In fact, the whole reference to gold in the articles of the decree is rather spectacular, unless a covert meaning is attached, which has been rumored, viz, that a certain proportion of all dues, customs

and otherwise, to the Government will have to be paid in gold and taken by the Government at this nominal rate of 20 per cent premium. This, however, is conjecture. But if it is carried out and put into execution it will occasion great hardship, as the gold will demand a much higher premium.

It is rather early as yet to predict what effects this new money will have upon the country. Intrinsically it is not worth as much as the Mexican money, and it is absolutely unsupported. That in the course of time it must find its level goes without saying. At present the new money is received with favor by the people, and exchange is weak. The ruling rate on New York is now in the neighborhood of 58 per cent.

The money comes to the island at a favorable time. The coffee crop is large, of good quality, and finds a ready market in Europe at good prices; consequently the supply of bills drawn against this crop upon Europe is quite plentiful in the island. When this resource is exhausted, as it soon will be, the new money may not meet with so much favor, and exchange is likely to advance.

I am, sir, your obedient servant,

JOHN D. HALL,
United States Consul.

Hon. EDWIN F. UHL,
Assistant Secretary of State, Washington, D. C.

[Translation.]

Government general of the Island of Puerto Rico.

TREASURY.

By the Minister of Ultramar, under the date of the 22d ultimo, there has been communicated to this government general the following royal decree:

On the proposition of the Minister of Ultramar, in accord with the council of ministers, and in the name of my august son, King Alfonso XIII, as Queen Regent of the Kingdom, by virtue of the authority granted by the law of the 28th of June last, in the second paragraph of its only article, in so far as it refers to the Island of Puerto Rico, and in conformity with the laws and regulations in force, in so far as respects the Philippine Archipelago, I come to decree as follows:

ARTICLE 1. There is created a (paper) note for the purpose of calling in and substituting the Mexican money current in the Spanish dominions.

ART. 2. The conditions for the exchange in each region and the form and procedure to be followed in carrying out the purpose for the creation of the (paper) note referred to in the preceding article shall be established in due time by special decrees.

ART. 3. The minister of ultramar shall issue in due time the necessary orders for putting in circulation the said note, in such quantities and series as may be thought fit.

Given at San Sebastian, on the 17th of August, 1895.

MARIA CRISTINA.

THOMAS CASTELLANOS Y VILLARROYA,
Minister of Ultramar.

And the fulfillment of the above having been resolved upon by me, upon this date it is published in the Official Gazette for general information.

JOSE GAMIR, *Governor-General.*

PUERTO RICO, *December 7, 1895.*

ROYAL DECREE.

By the Minister of Ultramar there has been communicated to this government general the following royal decree:

On the proposition of the Minister of Ultramar, in accord with the council of ministers and in name of my august son, King Alfonso XIII, as Queen Regent of the Kingdom, I come to decree as follows:

ARTICLE 1. Within the periods, and on the conditions established in the present decree, the Mexican dollars circulating in Puerto Rico are declared demonetized, and their circulation is hereby prohibited and all regulations whatsoever permitting it are repealed.

ART. 2. There is created in substitution of the Mexican dollar circulating in the island of Puerto Rico a special coin—that is, the Spanish dollar, of the dimensions and fineness identical with those of the coin of 5 pesetas. The said coin of 1 dollar

shall circulate in Puerto Rico from the first day of those fixed upon for the calling in of the Mexican money with the full legal-tender value of 100 cents.

ART. 3. The Government shall present to the Cortes, whenever experience shows the necessity, a bill authorizing the circulation in the provinces of the peninsula (Spain), and the adjacent islands, of said special money created for Puerto Rico.

ART. 4. Gold money of national coinage, and gold money of foreign coinage that may legally circulate in the Spanish dominions, shall be admitted in the future into the treasury of Puerto Rico, and in all transactions between individuals, at a premium of 20 per centum on its nominal value.

ART. 5. The Government shall proceed immediately to call in and recoin the foreign fractional money now circulating in Puerto Rico, exchanging for it fractional money of special coinage, and identical, in respect to its fineness and value, to similar money now circulating in the peninsular provinces (Spain). At the same time there shall be brought into circulation in Puerto Rico a quantity of bronze money, as much as may be deemed necessary.

ART. 6. The substitution of all the Mexican dollars circulating in Puerto Rico on the date of the promulgation of the present decree shall be made at 95 per centum of their nominal value—that is, 95 cents for each coin.

ART. 7. The note (paper) created by the decree of 17th of August last is made a legal tender for Puerto Rico. Said note shall circulate from the first day of those fixed for calling in the Mexican money with full-legal tender value in all payments between individuals and to the state, and shall be admitted in all the treasuries of the state at its full legal value of $1.

ART. 8. The calling in of the Mexican money shall be made simultaneously in the towns of the island which the governor-general may designate, commencing six days after the publication of the present decree in Puerto Rico.

ART. 9. The exchange shall be accomplished in special offices that may be established or provided in said towns during the space of eight days. In the four following days, Mexican dollars shall be taken in exchange in the central offices that may be established or provided in the capital, at the same value of 95 cents, provided that these are presented for exchange in amounts of not less than $120.

ART. 10. In the act of making the exchange to which the foregoing articles refer, the Mexican coin shall be redeemed as follows: One-half in dollars of the new coinage, and one-half in notes (paper) created by the decree of August 17.

ART. 11. On the expiration of the periods established by the foregoing articles, the Mexican dollars shall cease to have a legal circulation, and shall only be admitted into the treasuries of the State at the value of 55 cents in payment that may be made during ninety days following the termination of the period fixed for the exchange at San Juan, Puerto Rico.

ART. 12. The (paper) note shall be redeemed in the shortest period that the operation of recoinage may allow.

ART. 13. The redemption of the said note shall be made in silver for its full nominal value—that is, by delivering in exchange for each note a Spanish dollar of the special coinage.

ART. 14. The Government reserves the right to retire the note from circulation, exchanging it for the new money from the day following that on which it is put into circulation. The compulsory redemption and public calling in of notes shall be announced ten days in advance, and shall take place at the capital during fifteen days; the circulation of the note shall cease within the maximum period of three months, commencing from the day on which the exchange of the Mexican money terminates in San Juan, Puerto Rico, provided that the amount of Mexican dollars in Puerto Rico does not exceed 10,000,000.

ART. 15. The Government shall put immediately into circulation in Puerto Rico gold coin of national coinage to the amount of the excess resulting from the recoinage of the Mexican dollars now in circulation, after deducting the expense of such recoinage and the other expenses occasioned by the exchange. Such coin shall be put into circulation through the treasuries of the state and in payment of all current expenses of the budget of Puerto Rico in the proportion and from the day decided upon by the Government.

ART. 16. The minister of ultramar is hereby empowered to enact whatever regulations may be required for the execution of the present decree in all its parts.

Given at the palace on the 6th day of December, 1895.

MARIA CRISTINA.

TOMAS CASTELLANO Y VILLARROYA,
Minister of Ultramar.

And the fulfillment of the above having been decided upon by me, upon this date, it is published in the Official Gazette for general information and strict carrying out.

JOSE GAMIR, *Governor-General.*

PUERTO RICO, *December 7, 1895.*

CIRCULAR.

By virtue of the provisions of the royal decree of the 6th instant, published in the present Official Gazette, there shall begin, on the 14th instant, the exchange of the Mexican coins of $1 at the offices of rents and taxes and at the city halls of all the towns of this island, and this operation shall come to an end on the 21st of the present month at 12 o'clock p. m.

Only at the capital shall the period be extended until the 25th instant; from the 22d to the 25th there shall only be exchanged amounts that are not less than $120.

The exchange shall be carried on at the respective city halls and offices of rents and taxes, except in the larger towns, where other places may be established.

The hours designated for the public are from 8 to 11 a. m. and from 1 to 5 p. m., including holidays, except on the last day, on which the exchange shall be carried on until 12 p. m.

I enjoin very especially upon the mayors of this province to cause timely notices to circulate through their towns and municipal districts, in order that no one may be ignorant of the days, place, and hours on which the exchange is to take place, and to cause to circulate likewise the table of equivalents and other conditions of the same.

GAMIR.

PUERTO RICO, *December 7, 1895.*

TABLE OF EQUIVALENTS THAT SHALL SERVE AS A STANDARD FOR THE OPERATIONS OF THE EXCHANGE OF THE MEXICAN DOLLARS.

	There shall be delivered—		
	New dollars.	Notes.	Fractional Mexican money.
For 1 Mexican dollar	.....	.....	$1.00
For 2 Mexican dollars	1	.....	.95
For 3 Mexican dollars	1	1	.90
For 4 Mexican dollars	2	1	.85
For 5 Mexican dollars	2	2	.80

And so forth the table is carried out to $1,000.

Approved by His Excellency:

ECHENIQUE,
Intendente General de Hacienda.

PUERTO RICO, *December 7, 1896.*

CONSULATE OF THE UNITED STATES,
San Juan de Puerto Rico, December 24, 1895.

SIR: I have the honor to inclose herewith a type of the new money that has been exchanged for the Mexican dollar, and which now circulates in this island and is the standard of all business transactions. It is a coin of 1 peso (dollar) of 5 pesetas. The face is stamped with a profile bust of the little King, and around the margin is the inscription, "Alfonso XIII, by the grace of God Catholic King of Spain," with the date "1895." On the reverse is the coat of arms of Spain, and around the margin the words "Island of Puerto Rico, 1 peso, (5 pesetas)." The edge is unmilled, merely stamped at regular intervals, some little distance apart, with the raised emblem of the fleur-de-lis.

The coin is lighter than the Mexican dollar, and is at present purely provincial and unsupported. Whether Spain will ever fulfill the promise to make its circulation legal in Spain and her dominions remains to be seen.

All purchase of sugar and other commodities for export to the United States will be made in this coin as the standard, and invoices will be made out in the same. I therefore send the coin for inspection by the Treasury Department and for valuation by the Director of the Mint. It should be borne in mind that it will probably have a token value here beyond the intrinsic value, an unstable one, to be sure, depending upon Spanish legislation and other causes, but what that token value may be when financial affairs become more settled it is now impossible to say.

Exchange on New York has fallen in the last few days. It is to-day 54 per cent and unsteady. At this figure the new dollar is worth $0.6493 United States gold. That the value will remain at this figure is not to be expected.

I inclose a printed translation of the inclosure in my dispatch of December 10, ultimo. This translation is based upon mine. It is not so literal and in that particular may be better.

I am, sir, your obedient servant,

JOHN D. HALL,
United States Consul.

Hon. EDWIN F. UHL,
Assistant Secretary of State, Washington, D. C.

CONSULATE OF THE UNITED STATES,
San Juan de Puerto Rico, February 29, 1896.

SIR: I have the honor to inclose herewith the proclamation redeeming the fractional Mexican, American, and other foreign moneys now circulating in this island, with the new fractional money of a special coinage.

This will complete the redemption of the Mexican money circulating in Puerto Rico, begun last December with the redemption of the whole dollar, and which was reported in dispatch dated December 20, 1895.

After the 31st of March next Mexican money of any denomination will cease to be used as a circulating medium.

The greater part of the 5 and 10 cent pieces in circulation now are of United States coinage and mutilated.

I am, sir, your obedient servant,

JOHN D. HALL,
United States Consul.

ASSISTANT SECRETARY OF STATE,
Washington, D. C.

NEW CURRENCY IN PUERTO RICO.

[From the Board of Trade Journal, London, January, 1896, page 70.]

A dispatch, dated the 10th of December last, has been received at the foreign office from Sir H. Drummond Wolff, Her Majesty's ambassador at Madrid, reporting that a royal decree has been published in the Gaceta de Madrid of the 9th of December, forbidding the circulation in Puerto Rico of Mexican dollars. A special coinage will be issued of Spanish dollars, corresponding exactly to the 5-peseta piece at present in use. At the proper time a law will be introduced into the Cortes authorizing the circulation of this coinage in Spain.

Gold coins from the national mint and those which circulate in the Spanish dominions from foreign mints will be a legal tender in Puerto Rico, with a premium of 20 per cent over its nominal value.

The foreign coinage at present circulating in Puerto Rico will be at once called in and melted down for recoinage, and coins of the legal currency corresponding to that circulating in the peninsula will be given in exchange, and the necessary amount of bronze coinage will also be introduced.

Mexican dollars will be called in at the rate of 95 per cent of their nominal value, or 95 cents of the new coinage will be given for each Mexican dollar. The notes created by the law of August 17 will will come into use simultaneously with the new coinage at its full legal value of $1. The exchange will take place at various places in the island fixed by the governor-general, six days after the publication of the decree in the island, and it will continue during eight days. During the four following days they will be exchanged at the central offices in the capital, at the same rate of 95 cents to the dollar, if presented in quantities of not less than $120; half of the money given in exchange will be in the new coinage, and half in the notes before mentioned.

After the periods thus fixed, Mexican dollars will not have legal circulation. They will only be admitted at the state caisses, at the rate of 55 per cent, for ninety days after the exchange has been closed at San Juan de Puerto Rico.

The notes referred to will be redeemed as soon as the necessary delay in issuing the new coinage admits of it. It will be carried out at the full nominal value of $1 for each note, and the Government reserve the right of withdrawing the notes from circulation, and of giving silver in exchange immediately after giving ten days' notice, and the operation shall take place in the capital during fifteen days. The circulation of the notes is not to continue for more than three months from the date on which the calling in of Mexican dollars at San Juan de Puerto Rico has been accomplished, if the number of Mexican dollars in Puerto Rico does not exceed 10,000,000.

The Government will place in circulation in Puerto Rico gold coinage representing the surplus resulting from the recoinage of the Mexican dollar after paying all expenses connected therewith. These coins will be issued by the state caisses (cajas de estado), in the proportion, and from a date fixed by the Government.

PORTUGAL.

CONSULATE OF THE UNITED STATES,
Lisbon, May 9, 1896.

SIR: In reply to the interrogatories communicated to me by the Department of State, I report to you direct, as instructed, the answers inclosed.

Your obedient servant,

J. B. WILBOR, *Vice-Consul.*,

The DIRECTOR OF THE MINT, *Washington, D. C.*

Answers to interrogatories, 1895.

(1) No gold coined.

(2) Silver coined: Of 500 reis each, 216,000; value $116,640. Of 200 reis each, 15,000; value, $3,240. During the period there were withdrawn from circulation of foreign silver coins 839,471 kilograms, of the value of $29,199.23.

(3) Gold employed in the arts, 1,756 kilograms.

(4) Amount of new gold and old gold, not procurable.

(5) Amount of silver employed in the arts, 1,007 kilograms.

(6) Amount of new silver and old silver, not procurable.

(7) Importation of gold coin, $4,249.80; gold bars, $975,024. Exportation of gold, $2,267,536.68.

(8) Importation of silver coin, $96,077.88; silver bars, 159,120.72. Exportation of silver, $218,933.

(9, 10, and 11) No records exist to enable an answer to be procured as to the total imports of gold from the United States, and amount of gold coin deposited at mints and melted.

(12 and 13) No gold or silver produced from mines.

(14 and 15) No report is made to the mint of the output of gold and silver from refineries.

(16) Gold coin in the Bank of Portugal, $5,143,415.76.

(17) Silver coin in the Bank of Portugal, $7,437,736.44.

(18) The Government issues no notes.

(19) Issues of the Bank of Portugal (the only bank issuing notes), $59,720,092.56.

(20) Uncovered Government notes, at the end of the year, none.

(21) Uncovered bank notes, issues of the Bank of Portugal (see reply to interrogatory 19).

(22) Actual currency of the country, inconvertible paper.

(23) Average premium on gold, 23 per cent.

(24) Average value of the sovereign in reis, 5,535, or 43⅛ pence per milreis.

(25) No laws were passed during the year affecting the coinage, issue, or legal-tender character of the metallic or paper currency.

(26) No report of the operations of the mint is published.

RUSSIA.

LEGATION OF THE UNITED STATES,
St. Petersburg, March 31, 1896.

SIR: Referring to your dispatch of February 4, transmitting a list of interrogatories from the Treasury Department in regard to the coinage of gold and silver, etc., I now have the honor to send you herewith a copy of the reply thereto of Mr. Follendorff, director of the Imperial mint. I have thanked the director for his kindness.

I have the honor to be, sir, your obedient servant,

CLIFTON R. BRECKINRIDGE.

Hon. RICHARD OLNEY,
Secretary of State, Washington, D. C.

Replies to interrogatories, 1895.

(1) Gold coined:

	Rubles.
Imperials	50,000,380
Half imperials	180
Total	50,000,560

Amount recoined:

	Rubles.
Imperials from old Russian coin	4,660
Imperials from foreign coin	710
Total	5,370

(2) Silver coined:

High-standard coin—	Rubles.
Rubles	1,240,034.00
Halfr ubles (50 kopecks)	2,700,013.00
Quarter rubles (25 kopecks)	650,006.50
Total	4,590,053.50

Of these, 633,516 rubles were recoined from old Russian coin.

Low-standard coin—	Rubles.
15 kopecks	99,000.00
10 kopecks	100,000.60
Total	199,000.60

(12) The Imperial mint can not communicate how much fine gold was produced in Russia during 1895, but only how much of this gold was delivered to the mint up to the 1st of January, 1896. This quantity was equal to 2,654 poods 10 pounds 93 zolotniks 4 doleys, or 43,478,239.607 grams; value, 149,750,779 francs 75 centimes, or, Russian value, 37,437,694 rubles 92 kopecks.

(13) The above remarks respecting the production of gold also refer to the production of silver during 1895. Silver produced in Russia, delivered to the Imperial mint during 1895: 739 poods 8 pounds 52 zolotniks 11 doleys, or 12,108,660.672 grams; value, 672,846 rubles 25 kopecks, or 2,691,385 francs. The value of silver is throughout given in coining value, viz, 15½ times less than that of gold.

(14) In Russia there is only one Government refinery, at the Imperial mint, St. Petersburg. The accounts of this refinery, like those of the whole mint, are given for the fiscal year ending the 1st of August, and, therefore, the mint can only communicate the amount of fine gold yielded during the 1894–95 fiscal year, namely, 2,104 poods 29 pounds 3 zolotniks 45 doleys, or 34,476,383.723 grams; value, 29,686,492 rubles 3 kopecks, or 118,745,968 francs 12 centimes.

(15) The above remarks refer to silver. Yield of fine silver, 453 poods 3 pounds 62 zolotniks 39 doleys, or 7,421,844.264 grams; value, 412,413 rubles 74 kopecks, or 1,649,654 francs 96 centimes.

MINISTRY OF FINANCE,
CHANCELLERY OF THE OPERATIONS OF CREDIT,
St. Petersburg, July 13, 1896.

The DIRECTOR OF THE MINT, *Washington, D. C.:*

In answer to the request addressed by you to the ministry of finance, the chancellery of the operations of credit has the honor to send you herewith a note containing such information on gold, silver, and bills of credit as it has been able to collect for the year 1895.

B. MALICHEVSKI, *Director.*

Answers to interrogatories, 1895.

(1) Coinage of gold in 1895:

Total value	francs	250,002,800
Imperials	number	5,000,038
Half imperials	do	36
Total weight	kilograms	64,609.0270627
Weight of fine gold	do	58,148.1243564

NOTE.—In 1895 the recoinage of Russian coin was 18,240 francs and of foreign coins 2,614.73 francs.

(2) Coinage of silver:

Silver coin 0.900 fine; nominal value, the silver ruble (17.996 grams fine), calculated at 4 francs	francs	18,420,214
Pieces of 1 ruble	number	1,240,034
Pieces of 50 kopecks	do	5,400,026
Pieces of 25 kopecks	do	2,660,026
Total weight	kilograms	92,372.086987
Fine weight	do	83,134.878288

Silver billon 0.500 fine; nominal value (1 ruble equals 4 francs)	francs..	796,002.40
Pieces of 15 kopecks	number..	660,000
Pieces of 10 kopecks	do....	1,000,006
Total weight	kilograms.	3,597.418726
Fine weight	do....	1,798.709363

NOTE.—In 1895 no foreign pieces were melted down. Fractional Russian coins 0.500 and 0.750 fine were melted down. The melting produced 6,380.327615 kilograms of fine silver.

(3) Industrial employment of gold in 1895: Total weight, 4,940.967633 kilograms, of the value of 17,018,766 francs.

(4) There are no data to show how much of this was old material.

(5) Industrial employment of silver in 1895: Total weight, 145,823.372274 kilograms, of the value of 32,412,217.84 francs.

(6) There are no data to show how much of this was old material.

(7) Imports of gold in 1895:

Gold bars	kilograms..	6,142.535
Russian gold coin	do....	81.902
Foreign gold coin	do....	23,095.805
Manufactured articles (value)	francs..	1,429,665

Exports of gold in 1895:

Gold bars	kilograms..	16.38046
Russian gold coin	do....	98.2830
Foreign gold coin	do....	163.805
Manufactured articles (value)	francs..	40,782.50

(8) Imports of silver in 1895:

Bars	kilograms..	486,335.242
Russian silver coins	do....	556.936
Foreign silver coins	do....	33,711.067
Manufactured articles (value)	francs..	1,513,710

Exports of silver in 1895:

Bars	kilograms..	37,986.229
Foreign silver coins	do....	4,422.632
Manufactured articles (value)	francs..	113,195

(9 and 10) In 1895 there was no exportation of Russian gold to the United States and no importations of United States gold into Russia.

(11) There were no United States gold pieces at the St. Petersburg mint and no United States gold pieces recoined.

(12) Production of gold in 1895: Weight, 43,478.239607 kilograms, of the value of 149,750,779.78 francs.

(13) Production of silver in 1895 was 12,108.660672 kilograms, of the value of 2,691,385 francs.

(14) The weight of the fine gold treated in the refineries in 1895 was 34,476.458637 kilograms, of the value of 118,745,968.12 francs.

(15) The weight of the fine silver treated in the refineries in 1895 was 7,413.445384 kilograms, of the value of 1,647,829.24 francs.

(16) The gold coin and bullion in Russia at the end of 1895 was:

	Francs.
In the Imperial treasury and Bank of Russia	2,531,716,000
Including—	
The ordinary exchange fund	1,500,000,000
The extraordinary exchange fund	300,000,000
Total	1,800,000,000

There are no data of the amount of gold and silver in the hands of private individuals.

(17) The silver coin and bullion in Russia at the end of 1895 was (in the Imperial treasury and Bank of Russia): (*a*) Silver of full weight and fineness, 17,928,696 francs,[1] 12,179,821 francs,[2] 9,322,921.92 francs;[3] (*b*) divisional coin, 15,413,564 francs,[1] 10,471,173 francs,[2] 4,007,526.64 francs.[3]

(18) Bills of credit in circulation: Amount of these bills at the end of 1895, 4,485,126,536 francs, 3,046,960,962 francs.[2]

(19 and 21) There is no bank of issue in Russia except the State Bank of Russia.

(20) The amount of uncovered bills of credit in circulation at the end of 1895 was 2,420,910,416 francs, 1,644,640,228 francs.[2]

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[1] At the rate of 222.22 francs to the kilogram (ratio 1 to 15½).
[2] According to sight exchange on Paris, 36.80 rubles, equal to 100 francs.
[3] According to the London price of silver, 31⅛ pence per ounce, standard.

(22) The money of account and legal-tender money are the bills of credit.
(23) The average premium on gold in 1895 was 48 per cent.
(24) The average rate of exchange on London at sight was 93.48 rubles, equal to £10. The average St. Petersburg rate was 93.01 rubles, equal to £10.
(25) The laws promulgated in 1895 on coinage, the issue of bills, etc., are the ukase of May 19, 1895 (the importation by sea of Chinese iambs), and the ukase of June 19, 1895 (erasing the Mexican dollar from the table of coins having currency in the Russian marine—a measure rendered necessary by the depreciation of the white metal).
(26) No report of the operations of the mint is published.

CURRENCY REFORM IN RUSSIA.

[Consular Reports, May, 1896, p. 33.]

The expectation, but uncertainty, of currency reform has had a most depressing effect on Russian trade, home and foreign. The change, it may be said, has come sooner than was anticipated, and Russia now faces a new era of development in finance, industry, and foreign commerce.

The proposed reform, which has been worked out by the minister of finance and which will soon be introduced, may be described as follows:

A gold coin of 10 rubles will be issued, the value of which will be equal to that of the present paper ruble. The new coin will contain 1 zolotnik[1] and 78.24 dolias (about 119.05 grains troy) of pure gold. Its full weight will be 2 zolotniks and 1.6 dolias, and it will be legal tender to any amount. Silver, although taken in the Government treasuries to any amount, will be accepted for customs only to the value of 1 ruble, and may be refused in payment of private accounts when presented in sums of more than 50 rubles. One ruble of the present gold coins (imperials and half imperials, issue of 1885) will be accepted for 1.50 rubles of the new coinage; consequently, all Government and private loans and agreements contracted in metallic rubles before the new law comes into force will be counted at one and a half of the new coinage. The issue of deposit certificates will be stopped as soon as the customs duties are permitted to be paid in paper rubles. The Government bank must exchange paper bills of the Government for gold of the new coinage, ruble for ruble, the exchange to be made at the St. Petersburg section of the bank for any amount which will be on hand, and for this purpose the bank will be supplied, for the present, with the sum of 750,000,000 rubles of the new coinage, being the present exchange fund of the bank.

Hereafter the Government treasury will issue no more paper bills, but those outstanding have the same force in payments as the gold money of the new coinage.

The Government bank is permitted to issue bills for commercial operations to the extent of a milliard, on condition that the paper bills in circulation shall not exceed by more than double the amount of gold on hand, while for every paper ruble issued over the milliard there must be gold on hand to cover the same.

The issuance and destruction by the bank of paper money will be controlled by officers of the Government, assisted by the representatives of the nobility, commerce, St. Petersburg city council, and the St. Petersburg Exchange.

JOHN KAREL, *Consul-General.*

ST. PETERSBURG, *April 4, 1896.*

UNITED STATES GOLD COIN IN RUSSIA.

[Consular Reports, May, 1896, p. 39.]

By an imperial order issued to the minister of finance on the 1st of January, 1896, he was ordered to transmit from the treasury the sum of 50,000,000 rubles (gold) to the exchange fund of the Government bank, for the purpose of lessening the debt, bearing no interest, for paper currency; and the order was carried out on the 3d of March, 1896, when the above sum, consisting of Russian and foreign gold coin and bars, was transmitted under the supervision of an assistant minister of finance, the council of the Government bank, and selected members of the stock exchange and merchants of St. Petersburg, who, after satisfying themselves as to the value and correctness of the amount, verified a statement to that effect.

Consuls of foreign countries residing in St. Petersburg were invited, on request of the minister of finance, by the governor of the bank to be present as guests on that

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[1] 1 zolotnik (4.2657 grams) = 96 dolias.

occasion. I had the honor to be invited, and was present. After some preliminary proceedings we were led into the vaults of the bank, protected outside by a military guard, and examined, first, the gold (50,000,000 rubles) deposited according to the ukase, which consisted of the following denominations:

Denomination.	Number of pieces.	Weight.				Value.
		Poods.	*Pounds.*	*Zolotniks.*	*Dolias.*	*Rubles.*
United States, half eagles	2,220,000	1,132	4	91	12	14,371,756.00
England, pounds sterling	144,007	70	2	90	81	906,039.24
France, 20 francs	127,000	49	34	79	12	633,068.18
Germany, 20 marks	174,000	84	17	89	53	1,071,914.53
Belgium, 20 francs	160,000	62	37	91	81	799,087.09
Italy, 20 lire	7,000	2	30	1	60	34,014.46
Greece, 20 drachmas	26,000	10	9	26	36	129,885.54
Austria:						
8 florins	4,000	1	22	90	48	19,575.21
Ducats	4,000	.....	33	87	78	11,732.30
Turkey, lire	65,000	28	19	75	6	366,778.48
Japan, 5 yen	259,971½	132	9	8	3	1,678,519.11
Roumania, 20 levs	53,500	21	2	69	78	267,444.01
Finland, 20 marks	98,500	38	31	40	30	492,351.44
Russia:						
Half imperials—						
Old coinage	397,031	158	11	56	41	2,040,590.12
New coinage	4,925	1	37	55	78	24,625.00
Imperials, new coinage	2,106,500	1,058	34	72	48	21,065,000.00
Gold in bars	822	438	10	7	17	6,086,719.29
Total	.....	.....	.....	.....	.....	50,000,000.00

NOTE.—Pood = 36.112 pounds; Russian pound = 409.51 grams avoirdupois: zolotnik = 96 dolias = 4.2657 grams troy weight.

After the examination of this lot we were shown the balance of the bank's gold and silver funds on hand that day, consisting of gold coin and bars of the value of 572,836,347 rubles and of silver of 1,424,025 rubles. In this lot were 3,933,823 United States half eagles, valued at 25,462,945 rubles, so that the Russian Government Bank has on hand to-day 6,153,823 United States half eagles, or $30,769,115 in gold coin. To my inquiry as to how that amount of United States gold coin came there the governor of the bank informed me that the minister of finance purchased it at different times in Berlin, Paris, and London.

The gold coin is kept in small bags, and those again in larger ones, which are piled up in tiers. Each bag is sealed, with a ticket attached, on which is written—sometimes it is directly on the bag—the denomination, the number of pieces therein, and the value thereof. The bullion is kept in open cases protected by heavy wire screens. Each case contains gold bullion to the value of 5,000,000 rubles.

JOHN KAREL, *Consul-General.*

ST. PETERSBURG, *March 5, 1896.*

GOLD AND PAPER MONEY IN RUSSIA.

[Consular Reports, May, 1896, p. 34].

The rate of exchange for gold imperials has been raised 1 35 per cent over the last quotation, and this advance has been made, according to the statement of the imperial minister of finance, simply for convenience and simplification of calculation, making its relation 1 to 1½; so that the present value of the Russian gold currency is adjusted as follows:

	Rubles.
1 imperial, new issue	15.00
Half imperial, new issue	7.50
1 imperial, old issue	15.45
Half imperial, old issue	7.72
1 chervonec	4.63

This rate will remain until December 31, 1896. According to the above quotations, 1 gold ruble equals 1.50 rubles in the credit or paper ruble or 1 paper ruble equals 66⅔ copecks in gold.

In announcing this change the minister of finance reviewed the development of the various measures adopted for the fixing of the rate and their favorable results. After citing the different changes, he says:

"The great instability of the rate of exchange had a very bad influence on Russian commercial life. Agreements which had any relation directly or indirectly with

foreign trade and were not guarded against loss by the so-called 'covering of risks,' proved generally unprofitable. The most careful financial calculations were often risky. The considerable fluctuation of the ruble caused the prices of different articles to change. If the rate of exchange fell, it embarrassed the import of foreign goods, and, in case of advance, it facilitated foreign competition with Russia's production; hence, some speculators gained large unmerited profits and others lost. On the average, the country had only occasional profits, but generally sustained large unexpected losses, which often embarrassed enterprises."

In 1892 the ministry of finance decided to stop the speculation in paper rubles and to protect their value abroad, and for that purpose adopted two measures—

(1) By issuing an order June 20, 1893, to the Russian exchanges, forbidding the making of the differences in gold value, and ordering a statistical duty for discount of the ruble moving across the frontier, reenforcing supervision of stock exchanges and restraining the banks from exporting rubles for speculation.

(2) A measure for the satisfaction of the demands of foreign bills of exchange and proposals for the same, if they really were necessary for the purposes of commerce. The large amount of gold (over 670,000,000 rubles) accumulated by the Government treasury and by the Government Bank at the end of 1880 and beginning of 1890, and which has since increased still more, offered the possibility of establishing the stability of the rate of exchange.

Further, since 1892, the amount of paper rubles has not increased, because the 125,000,000 rubles which were temporarily issued August 14 and 28 and September 23, 1892, and October 4, 1893, were withdrawn on January 30 and March 15, 1893, and June 9, 1894. However, the gold guaranty of credit bills increased considerably, in consequence of the reenforcement of the exchange fund by the order of the Czar on December 4, 1894, and March 3, 1895, to the amount of 160,000,000 gold rubles. This fund now amounts to 375,000,000 gold rubles, independent of the 75,000,000 rubles of the temporary issue, which were not withdrawn from circulation and which guaranty ruble for a ruble. The desire of the ministry of finance to lessen the fluctuation of the value of the paper ruble and the measures taken for this purpose were mistrusted, not only by circles interested in the continual fluctuations of the rate of exchange, but by a considerable part of the population. They supposed that the fluctuation of Russian rates of exchange was inevitable and impossible to successfully oppose; that the interference of the Government would only destroy the natural order of economic relations, and, without bettering the situation, cause great losses. The propagation of such ideas, which gave to the abnormal course of things the significance of an economic law, shows that the evil done by the instability of the money unit has penetrated so deep into the economic life of Russia that the public opinion of the country has become used to it. Facts, however, show that these apprehensions were erroneous. After the adoption of these measures, the rate of exchange did not undergo any great changes, and its fluctuations decreased gradually, coming down to such a minimum that they did not influence the price of the paper ruble and did not exceed the normal changes of the rate of exchange between countries with metallic currencies.

In 1892 the fluctuations of the rate of exchange, in comparison with the lowest rate of exchange of St. Petersburg on London, equaled 9.6 per cent (in 1890 it was 19½ per cent, and in 1891 28 per cent); in 1893, 6 per cent; in 1894, 1.94 per cent; and during ten months and a half of 1895 they did not exceed 0.54 per cent, notwithstanding that during the few latter months great political and economic events of universal importance, and especially of great significance to Russia, have taken place, such as the temporary interruption of commercial relations between Russia and Germany, the death of Alexander III, the war between China and Japan and the diplomatic negotiations between the different powers which occurred therefrom, and, finally, the difficulties on the Balkan Peninsula and in Asia Minor. The rate of the ruble, which was before influenced by the smallest political event, remained during the above most important events on a scarcely changeable level; and when, in the autumn of 1894, foreign stock jobbers tried to take advantage for their own interest of distressing times they suffered great losses, as their operations proved unsuccessful.

The stabitity of the rate of exchange attracted the attention of a special committee of finance, which, in its journal of March 15, 1895, stated that "the policy which the ministry of finance pursues, decreasing the fluctuations of the price of the paper ruble to a minimum, is quite successful." Being satisfied that the money market can be guarded from fluctuations, and having given proofs of the stability of the ruble to persuade the commerce and industry of Russia and foreign stock exchanges, the ministry of finance began to secure the results acquired by trying to do away with such obstacles as hindered the circulation of the gold currency. To this end, when the opinion of the Government council, sanctioned by the Czar on May 8, 1895, permitted agreements in Russian gold coin to be made and different duties to be paid in

gold at the rate fixed by the minister of finance, the following principal measures were adopted:

(1) All establishments of the Government Bank were allowed to buy and the principal ones also to sell gold coins at the rate fixed, as published.

(2) Regulations concerning deposit certificates written on a gold basis were published, and on August 1, 1895, all establishments of the Government Bank began to issue such certificates.

(3) In August, the St. Petersburg and Moscow banking offices and other establishments of the Government Bank began to accept gold money on current accounts.

(4) From July 1 to August 31 permission was given to pay in gold coin into the Government treasuries some of the excises, and from September 1 into all the treasuries all the excise duties. Furthermore, by virtue of the opinion of the Government council, sanctioned by the Czar on November 6, 1895, all the Government establishments and also railway offices were permitted to accept gold coin for all kinds of payment.

The price of the gold coin was fixed in accordance with its exchange value, namely, 7.40 rubles for a half imperial and 14.80 rubles for 1 imperial of the coinage of December 17, 1895, and, in conformity thereto, the price of the gold money of the old coinage was fixed. For the receipt of the gold money at the treasuries and other Government establishments, this price was fixed for a certain period, first until August 31 and then until December 31, 1895; for the sale and purchase of the gold by the establishments of the Government Bank, this price was fixed on May 25, 1895, for an uncertain period, and, in case of change, the new price would come into force only on the day after its publication.

Until the end of November, this price—7.40 rubles for a half imperial—did not change, and on all the Russian exchanges contracts were made on a gold basis at the price fixed by the bank. In the autumn, as usual, big demands for money take place in the Government bank. In order to satisfy the urgent necessities of commerce and industry without issuing temporarily paper rubles, the Government bank put out a large amount of gold coin, which, however, could be immediately changed for paper money, if desired.

At the beginning, neither the merchants nor the public wished to accept gold, partly because during the last thirty-five years our population lost the habit of using or seeing gold currency, and partly because they were afraid that the value of gold coins would depreciate and that the holder would lose by it. Therefore many parties, and among them representatives of first-class business houses of Moscow, said that they would be willing and ready to accept gold money from the banks, provided the banks would agree to take the money back again within a certain period at the same price as it was issued. Their fears were erroneous. The ministry of finance had no intention of lowering artificially the value of gold. But to favor the circulation of gold currency, the Government bank, at the end of September, informed the country that the bank would buy and accept, until December 31, 1895, gold coin at a price not lower than the one fixed June 1, 1895, for the excise payments, namely: Imperial of new coinage, at 14.80 rubles in paper; half imperial, at 7.40 rubles in paper; imperial, old coinage, at 15.24 rubles; half imperial, at 7.62 rubles; chervonets, at 4.57 rubles.

From the foregoing, it will be seen that the Government bank bound itself until December 31, 1895, not to lower the rate of gold coins, but reserved the right of increasing it. But the minister of finance noticed that the price established was not at all convenient for calculations, i. e., that the price of a half imperial at 7.40 rubles made 1 gold ruble equal to 1.48 rubles in paper; consequently, the transfers from the gold to paper value were complicated for daily practice, and that a very small advance of the half imperial in value, say 10 copecks, making it 7.50 rubles, would simplify all calculations and payments, because 1 gold ruble would equal 1.50 rubles in paper, or the relative value of 1½, and for this reason, exclusively, the minister of finance decided to fix, for the term of one year from January 1, 1896, the last-named rate, at which the gold coin will be received by Government establishments and railway offices.

Although this advance is very small (1.35 per cent), in comparison with the fluctuations of the former years, still it would have been unjust toward persons who effected obligations on a gold basis of the former rate to make this change at the end of December. In order that such parties might liquidate their obligations without loss, the change in the rate was made gradually. November 25, the Government bank declared the value of the half imperial to be 7.45 rubles, and it is only now that it has been published that from January 1, 1896, all Government and railway establishments will accept half imperials at 7.50 rubles.

The foregoing statement goes to show (1) that the minister of finance will guard the price of the paper ruble from fluctuation in the future; (2) that the gradual change of the rate of gold coins from 7.40 rubles to 7.50 rubles for half imperials was not influenced by any exterior circumstances, but only by the desire to establish

a convenient and simple relation between the gold and paper values; (3) that in gradually changing the value of the gold currency, the minister of finance and the Government bank have lived up to the obligations taken upon themselves—i. e., gold coins were accepted at all Government and railway establishments at the fixed rate, and the rate was not lowered.

JOHN KAREL, *Consul-General.*

ST. PETERSBURG, *December 24, 1895.*

CIRCULATION OF BILLS OF CREDIT AND FLOATING DEBT; METALLIC RESOURCES (GOLD, NOT INCLUDING THE SILVER) OF THE BANK OF RUSSIA AND OF THE TREASURY.

Years.	Bills of credit.			Bank of Russia.		
				Exchange funds.		
	Total of the authorized issues.	Reserve in notes of the Bank of Russia.	Actual circulation (column a minus column b).	Properly so called.	Special.	Total.
	a	b	c	d	e	f
Jan. 1—	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*
1881.....	583, 231, 251. 33	24, 936, 343. 47	558, 294, 907. 87	132, 342, 089. 60	.....	132, 342, 089. 60
1882.....	583, 231, 251. 33	54, 232, 327. 87	528, 998, 923. 47	132, 342, 089. 60	.....	132, 342, 089. 60
1883.....	583, 231, 251. 33	82, 496, 672. 93	500, 734, 578. 40	132, 342, 089. 60	.....	132, 342, 089. 60
1884.....	567, 795, 251. 33	74, 214, 229. 87	493, 581, 021. 47	132, 342, 089. 60	.....	132, 342, 089. 60
1885.....	552, 359, 251. 33	89, 402, 224. 80	462, 957, 026. 53	132, 342, 089. 60	.....	132, 342, 089. 60
1886.....	538, 424, 659. 60	71, 915, 294. 93	466, 509, 364. 67	132, 342, 089. 60	.....	132, 342, 089. 60
1887.....	538, 424, 659. 60	54, 236, 444. 13	484, 188, 215. 47	132, 342, 089. 60	.....	132, 342, 089. 60
1888.....	538, 353, 654. 00	38, 648, 656. 80	499, 704, 997. 20	163, 214, 089. 60	.....	163, 214, 089. 60
1889.....	538, 353, 654. 00	37, 638, 113. 33	500, 715, 540. 67	163, 214, 089. 60	.....	163, 214, 089. 60
1890.....	538, 353, 654. 00	60, 647, 529. 47	477, 706, 124. 53	163, 214, 089. 60	.....	163, 214, 089. 60
1891.....	538, 353, 654. 00	71, 457, 874. 80	466, 895, 779. 20	163, 239, 559. 00	.....	163, 239, 559. 00
1892.....	576, 943, 654. 00	34, 211, 321. 33	542, 732, 332. 67	163, 239, 559. 00	57, 885, 000. 00	221, 124, 559. 00
1893.....	615. 533 654. 00	62, 883, 176. 80	552, 650, 477. 20	163, 239, 559. 00	115, 770, 000. 00	279. 009, 559. 00
1894.....	615, 526, 965. 07	64, 016, 693. 73	551, 510, 271. 33	162, 370, 512. 20	115, 770, 000. 00	278, 140, 512. 20
1895.....	576, 936, 965. 07	37, 869, 653. 33	539, 067, 311. 73	212, 872, 473. 40	57, 885, 000. 00	270, 757, 473. 40
1896.....	576, 936, 965. 07	33, 986, 984. 80	542, 949, 980. 27	289, 425, 000. 00	57, 885, 000. 00	347, 310, 000. 00
Up to Aug. 1, 1896...	576, 936, 965. 07	55, 329, 827. 47	521, 607, 137. 60	328, 015, 000. 00	57, 885, 000. 90	385, 900, 000. 00

One gold rouble equals 1½ credit roubles.
One credit rouble equals two-thirds of a gold rouble.

Years.	Bank of Russia.				Treasury notes.		
	Other metallic resources.						
	Balances credited to the Bank of Russia in foreign countries.	Gold specie on hand (belonging especially to the Bank of Russia).	Total.	Total resources (columns f and i).	Properly so called.	For 6 months.	Total.
	g	h	i	j	k	l	m
Jan. 1—	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*
1881.....	10,033.40	8,935,900.40	8,945,933.80	141,288,023.40	111,139,200.00	.....	111,139,200.00
1882.....	.....	5,976,047.40	5,976,047.40	138,318,137.00	111,139,200.00	87,470.67	111,226,670.67
1883.....	.....	5,976,047.40	5,976,047.40	138,318,137.00	111,139,200.00	.....	111,139,200.00
1884.....	11,066,068.40	6,466,140.40	17,532,208.80	140,874,298.40	115,615,640.00	25,726,666.67	141,342,306.67
1885.....	1,521,989.60	14,103,101.40	15,625,091.00	147,967,180.60	123,486,456.40	.....	123,486,456.40
1886.....	15,073,254.00	34,324,261.40	49,397,515.40	181,739,605.00	123,488,000.00	12,863,333.33	136,351,333.33
1887.....	13,095,902.40	40,254,772.60	53,350,675.00	185,692,764.60	123,488,000.00	.....	123,488,000.00
1888.....	12,077,898.20	7,716,456.40	19,794,354.60	183,008,444.20	123,488,000.00	.....	123,488,000.00
1889.....	18,713,834.60	11,066,840.20	29,780,674.80	192,994,764.40	123,488,000.00	.....	123,488,000.00
1890.....	46,291,792.20	5,305,353.20	51,597,145.40	214,811,235.00	114,226,400.00	.....	114,226,400.00
1891.....	83,323,528.00	27,330,981 60	110,654,509.60	273,894,068.60	111,139,200.00	.....	111,139,200.00
1892.....	36,096,314.20	52,835,884.40	88,932,198.60	310,056,757.60	111,139,200.00	.....	111,139,200.00
1893.....	40,925,466.80	55,966,305.20	96,891,772.00	375,901,331.00	111,139,200.00	.....	111,139,200.00
1894.....	5,482,095.40	16,878,494.20	22,360,589.40	300,501,101.80	111,139,200.00	.....	111,139,200.00
1895.....	10,239,470.60	30,516,972.00	40,756,442.60	311,513,916.00	110,794,977.20	.....	110,794,977.20
1896.....	8,897,310.40	22,031,802.80	30,929,113.20	378,239,113.20	110,794,977.20	.....	110,794,977.20
Up to Aug. 1, 1896....	2,263,689.40	48,401,121.60	50,664,811.00	436,564,811.00	110,794,977.20	.....	110,794,977.20

CIRCULATION OF BILLS OF CREDIT AND FLOATING DEBT; METALLIC RESOURCES (GOLD, NOT INCLUDING THE SILVER) OF THE BANK OF RUSSIA AND OF THE TREASURY—Continued.

Years.	Funds at the disposal of the treasury.			General total of the liabilities (columns c and m).	General total of the assets (columns j and p).	Ratio of assets to liabilities.
	Bullion and gold coin held by the Bank of Russia.	Credit accounts of the Russian treasury in foreign countries.	Total.			
	n	o	p	q	r	s
Jan. 1—	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	*Per cent.*
1881	17,942,806.40	65,449,411.80	83,392,218.20	669,434,107.87	224,680,241.60	22.4
1882	3,756,350.60	39,787,061.80	43,543,412.40	640,225,594.13	181,861,549.40	18.9
1883	1,918,694.80	27,008,369.20	28,927,064.00	611,873,778.40	167,245,201.00	18.2
1884	3,308,706.60	19,957,204.40	23,265,911.00	634,923,328.13	173,140,209.40	18.2
1885	3,889,872.00	58,987,902.20	62,877,774.20	586,443,482.93	210,844,954.80	24
1886	652,942.80	57,732,183.60	58,385,126.40	602,860,698.00	240,124,731.40	26.6
1887	3,814,235.60	27,790,202.60	31,604,438.20	607,676,182.13	217,297,202.80	23.8
1888	9,375,054.60	18,899,066.60	28,274,121.20	623,192,997.20	211,282,565.40	22.6
1889	18,999,400.60	17,315,333.00	36,314,133.60	624,202,511.60	229,309,498.00	24.5
1890	13,461,735.60	59,134,544.20	72,596,279.80	591,932,524.53	287,407,514.80	32.4
1891	14,069,142.20	85,446,749.80	99,515,892.00	578,034,979.20	373,409,960.60	43
1892	18,012,268.40	54,115,528.80	72,127,797.20	653,871,532.67	382,184,554.80	39
1893	50,840,009.60	22,098,949.40	72,938,959.00	663,789,677.20	448,840,290.00	45.1
1894	149,554,001.40	11,925,081.80	161,479,083.20	662,649,471.33	461,980,185.00	46.5
1895	150,795,055.80	36,066,214.00	186,861,269.80	649,862,288.93	498,375,185.80	51.1
1896	119,152,799.40	11,626,395.20	130,779,194.60	653,744,957.47	509,018,307.80	51.9
Up to Aug. 1, 1896	86,893,874.80	83,112,054.80	170,005,929.60	632,402,114.80	606,570,740.60	[1] 63.9

[1] At the actual rate of exchange (1 gold ruble = 1½ credit rubles), the ratio is 96 per cent. After January 1, 1896, the increase of the assets is of 126,396,000 gold rubles.

SANTO DOMINGO.

MONETARY LAW OF THE DOMINICAN REPUBLIC, ENACTED AT SANTO DOMINGO APRIL 28, 1894.

ARTICLE 5. I. The gold coins of the Republic shall be the following:

(*a*) The gold piece of $20, which shall weigh 516 grains troy gold weight.

(*b*) The gold piece of $10, which shall weigh 258 grains troy gold weight.

(*c*) The gold piece of $5, which shall weigh 129 grains troy gold weight.

II. The silver coins of the Republic shall be as follows:

(*a*) The silver piece of $1, which shall be required to weigh 422⅔ grains troy gold weight.

(*b*) The silver piece of 50 cents, which shall be required to weigh 211⅓ grains troy gold weight.

(*c*) The silver piece of 25 cents, which shall weigh 105⅔ grains troy gold weight.

(*d*) The silver piece of 10 cents, which shall weigh 42⅔ grains troy gold weight.

III. The nickel coins shall be the following:

(*a*) The nickel piece of 2½ cents shall be the same weight and dimensions as those now in circulation.

(*b*) The nickel piece of 1¼ cents, idem.

ART. 6. The gold and silver coins shall be circular in form with milled edges. The size or diameter of the various coins shall be the following:

I. Gold coins—

(*a*) The gold piece of $20 shall have a diameter of 34.28937 millimeters.

(*b*) The gold piece of $10 shall have a diameter 26.66951 millimeters.

(*c*) The gold piece of $5 shall have a diameter of 21.58960 millimeters.

II. Silver coins—

(*a*) The silver piece of $1 shall have a diameter of 38.09931 millimeters.

(*b*) The silver piece of 50 cents shall have a diameter of 30.47944 millimeters.

(*c*) The silver piece of 25 cents shall have a diameter of 24.12956 millimeters.

(*d*) The silver piece of 10 cents shall have a diameter of 17.77967 millimeters.

ART. 7. The design for the nickel coins, as well as the other conditions of said coins, shall be fixed by a decree which the executive power is authorized to make.

ART. 8. The design for the gold and silver coin shall be as follows:

Upon one face—that is, upon the obverse—the figure of Liberty, looking toward the right, the head bound with a fillet upon the surface of which is engraved the word "liberty," and the figure surrounded by letters expressing the value of the

piece and the date of its coinage. Upon the other face—that is, upon the reverse—the coat of arms of the Republic, surrounded by the inscription "Republica Dominicana," and underneath the numbers of figures expressing the weight and the fineness of the respective coins.

Chapter II.

ART. 10. The maximum and minimum of the gold and silver coins, or the deviations permitted in their weight, shall never exceed the following limits of tolerance:

I. In the gold pieces of $20 and $10 the half of 1 grain. In the piece of $5 one-fourth of a grain.

II. In the silver pieces of $1, of 50 cents, of 25 cents, and of 10 cents, 1½ grains.

SERVIA.

Replies to interrogatories, 1895.

(1 and 2) No gold or silver was coined, recoined, or withdrawn from circulation during 1895.

(3, 4, 5, 6, 7, 8, 9, and 10) There are no statistics as to the amount of new or old gold and silver used in the industrial arts, import and export of gold and silver, or import of United States gold coin during 1895.

(11, 12, 13, 14, and 15) No United States gold coin was deposited at the mints and melted, and no gold or silver was produced from the mines or from refineries of the country during 1895.

(16) Approximate stock of gold coin and bullion in the country at the close of the calendar year 1895, 8,000,000 francs.

(17) Approximate stock of silver coin and bullion in the country at the close of the calendar year 1895, 9,000,000 francs.

(18) There were no Government notes outstanding at the end of 1895.

(19) Amount of bank notes outstanding at the end of the year, 25,993,670 francs.

(20) Amount of uncovered Government notes, none.

(21) Amount of uncovered bank notes at the end of 1895, 15,153,237 francs.

(22) Actual currency of the country, gold and silver.

(23) Gold was at a premium of 14½ per cent as compared with the actual currency of the country.

(24) Average rate of exchange on London during 1895, 29 francs to the pound sterling.

(25) No laws were passed during 1895 affecting the coinage, issue, or legal-tender character of the metallic or paper currency.

(26) There is no mint in Servia, consequently no report.

SIAM.

UNITED STATES LEGATION, *Bangkok, Siam.*

DEAR SIR: I have the honor to submit herewith the answers of the Siamese Government to the questions asked in a circular under date of January, 1896, and received here about March 30. As to the delay, I can simply say that it was beyond my control.

You will note that many of the most important interrogatories are not answered, but this is due to the fact that the Siamese Government is unable to answer them.

I would especially call your attention to the most remarkable stock of silver coin and bullion in this little Kingdom—322,201,930 ticals, equal to $193,321,188 Mexican or about $100,000,000 United States currency. In other words, this rich little Kingdom has an enormous (in proportion to population and area) reserve of $150,000,000 (Mexican), as there are not more than $43,000,000 in every-day circulation.

I am, sir, your obedient servant,

JOHN A. BARRETT,
United States Minister and Consul-General.

Answers to interrogatories, 1895.

(1) No gold was coined during 1895.

(2) Silver coined: 4,316,372 ticals, in pieces of 1 tical, 1 salung, and 1 fuang, from foreign coinage. (A tical equals 60 cents of a Mexican dollar, a salung equals one-fourth of a tical, and a fuang equals one-eighth of a tical.)

(7) Import of gold: From Hongkong, 113 chests, to the value of $730,525 (Mexican).

Export of gold: To Singapore, 36 chests, to the value of $50,617 (Mexican); to Hongkong, 1 chest, to the value of $1,500 (Mexican); to the interior of Siam, 8 chests, to the value of $1,760 (Mexican); total, 45 chests, to the value of $53,877 (Mexican).

(8) Import of silver: From Singapore, 1,103 chests, to the value of $3,424,435 (Mexican); from Hongkong, 268 chests, to the value of $1,105,664 (Mexican); from the interior, 16 chests, to the value of $34,000 (Mexican); total, 1,387 chests, to the value of $4,567,195 (Mexican).

Export of silver: To Singapore, $596,189 coined, $300 ingot; to Hongkong, $600,210 (Mexican); to the interior, $513,900 (Mexican). Total amount of export, coin, $2,623,965 (Mexican); ingot, $300 (Mexican).

(16) Stock of gold coin and bullion in the country at the close of the calendar year 1895, about 1,026,754 ticals, equal to $615,982.40 (Mexican).

(17) Stock of silver coin and bullion in the country at the close of the calendar year 1895, about 322,201,980 ticals, equal to $193,321,188 (Mexican).

(24) Average rate of exchange on London during 1895, 2s. 2d., at $1 (Mexican).

MONEY IN SMYRNA.

[From the Board of Trade Journal, August, page 204.]

The Bollctino di Notizie Commerciali, quoting from the bulletin of the French chamber of commerce at Smyrna, says that the value of current coins at Smyrna varies according to the class of payments made. Thus the Turkish gold lira and silver medjidie are worth, respectively, 178 piasters and 33 piasters if they are used to pay salaries, daily expenses, or for articles of necessity. In the purchase of raisins, cottons, wool, etc., they are only worth 125 and 23 piasters; 135.25 and 25 in wholesale sales of colonial goods and manufactured tissues; 110.75 and 20.50 when paying for barley, oleaginous seeds, skins, wax, gums, etc.; 108 and 20 in the case of oils, opium, iron, copper, etc.; and are only worth 100 and 19 piasters, respectively, when making payments connected with the public administration. These differences in the value of money at Smyrna are the consequence of the monetary disorder produced at the commencement of the century by the Sublime Porte issuing a legal currency containing a great amount of copper of a value intrinsically much lower than its nominal value. Since 1844—that is, from the time that the Sultan Abdul Medjid decreed certain monetary reforms—the above debased coinage has gradually withdrawn, but the Smyrna merchants are so used to their complicated system that they are averse to any change, and it will be long before any other is adopted.

SPAIN.

LEGATION OF THE UNITED STATES,
Madrid, May 22, 1896.

SIR: I herewith inclose the answers received from the direction general of the public treasury of this capital to the interrogatories forwarded to this legation by the Department of State, in January last, and prepared by the Treasury Department.

I have the honor to be, sir, your obedient servant,

HANNIS TAYLOR,
United States Minister.

The DIRECTOR OF THE MINT, *Washington, D. C.*

[Translation.]

Replies to interrogatories, 1895.

(1) No gold was coined nor recoined during the year 1895.

(2) In order to regulate the circulation of currency the Mexican dollars which existed in Puerto Rico have been withdrawn. During the year 1895 the following amounts were coined in the mint for said island:

	Pesetas.
Dollar coins	40,576,965
Peseta coins for Spain (recoined)	715,431
Total	41,292,396

(3, 4, 5, and 6) The weight of fine gold and silver and the amount of new or old metal used in the industrial arts during the year is not known.

(7) Importation and exportation of gold:

	Kilograms.	Pesetas.
Importation:		
Ore (sand)	1.250	4,495
Coins	.....	599,725
Total	.....	604,220
Exportation:		
Bullion and coins	183.10	567,610

(8) Importation and exportation of silver:

	Kilograms.	Pesetas.
Importation:		
Bullion	4,425	619,500
Coins	.....	23,028,549
Total	.....	23,648,049
Exportation:		
Bullion	19,175	3,068,096
Coins	240,974	38,555,888
Total	.....	41,623,984

(9, 10, 11, and 12) There was no import of gold or United States gold coin during 1895, and no United States gold coin was deposited at the mints and melted. No gold was produced from mines.

(13) Production of mines:

	Kilograms.
From silver ores, properly called pure silver	10,268
From silver-lead ores, 181,438 tons, containing on an average 430 grams of silver per ton	78,016
From iron-silver ores	115
From lead ores, 85,621 tons, containing on an average 250 grams of silver per ton	21,405
Total pure silver corresponding to the production of silver ores in 1895	109,804

Commercial value in pesetas, 12,078,440.

(14) There are no refineries of gold in Spain.

(15) The amount of fine silver obtained in the refineries in Spain during the year 1895 has been 58,546 kilograms, its commercial value being 6,804,980 pesetas.

(16) The only way to answer this question is to quote the stock of gold in the Bank of Spain. This metal being at a premium, no gold coin or bullion are in circulation in Spain as legal currency, and the amount in possession of private parties can not be estimated.

Stock in the Bank of Spain:

	Pesetas.
Gold coins	188,945,926.09
Gold bullion	11,165,166.62
Total	200,111,092.71

(17) It is indispensable to refer to the stock in the Bank of Spain in order to answer this question, because, although the silver coin is the only coin in circulation in Spain, the coin in the hands of private parties can not be fixed, and the stock which exists in other banks, according to their balances of account, is deposited with the Bank of Spain.

	Pesetas.
Silver coins	246,049,550.78
Silver bullion	9,586,425.53
Total	255,635,976.31

(18) There are no Government notes in Spain. The only bank authorized to issue notes is the Bank of Spain, and this bank had, at the end of the year 1895, 989,511,550 pesetas in outstanding notes, according to its balance.

(20) No uncovered Government notes exist in Spain.

(21) The Bank of Spain's notes amounted to 989,511,550 pesetas and the stock in gold and silver at that date amounted to 455,747,069.02 pesetas, the difference being covered by loan policies, assets with guarantees, and discounted bills payable within the period marked by law.

(22) The actual currency of the country was represented as follows:

	Pesetas.
Gold coins in the Bank of Spain	188,945,926.09
Silver coins in the Bank of Spain	246,049,550.78
Notes Bank of Spain	989,511,550.00
Total	1,424,507,026.87

(23) Gold is at a premium of 13.975 per cent as compared with the actual currency of the country.

(24) The average rate of exchange on London during the year 1895, was 14.357 per cent.

(25 and 26) No laws were passed during the year affecting the coinage, issue, or legal-tender character of the metallic or paper currency, and no report of the operations of the mint was published.

MADRID, *April 21, 1896.*

VALUE AND WEIGHT OF THE GOLD COINS RECEIVED AT THE MINT OF MADRID FOR RECOINAGE, FROM 1868 TO 1893.

Years.	Value of the coins received.	Weight.	Years.	Value of the coins received.	Weight.
	Pesetas.	*Kilograms.*		*Pesetas.*	*Kilograms.*
1868 to 1870	.....	.....	1883	51,729.46	17.104
1871	77,486.04	26.648	1884	623,859.71	207.672
1872	245,103.90	84.160	1885	1,340,999.60	440.254
1873	228,486.76	78.547	1886	1,911,524.92	634.470
1874	300,071.09	103.236	1887	17,973.57	5.952
1875	194,422.60	66.883	1888	4,185.29	1.390
1876	33,006,083.02	10,659.614	1889	7,240,017.53	2,377.470
1877	205,746,303.53	66,017.332	1890	840,686.82	277.257
1878	110,533,151.30	35,675.196	1891	331.53	0.110
1879	64,468,371.99	20,803.430	1892 and 1893	.....	.....
1880	57,924,177.30	18,693.903			
1881	51,864,506.82	16,733.843	Total	540,711,986.23	174,254.061
1882	4,092,513.45	1,349.590			

NUMBER AND WEIGHT OF THE SILVER COINS RECEIVED AT THE MINT OF MADRID FOR RECOINAGE FROM 1868 TO 1893.

Years.	Columnar pesetas.		Old coins abraded, etc.		Pesetas Isabeline.	
	Number.	Weight.	Number.	Weight.	Number.	Weight.
		Kilograms.		*Kilograms.*		*Kilograms.*
1868 to 1871						
1872	12,271	79.270	10,343	55.271		
1873	24,816	159.995	8,637	46.366		
1874	12,295	79.270	6,826	36.345		
1875	19,771	127.440	23,287	121.325		
1876	569,000	3,456.270	6,907	35.629		
1877	1,483,713	8,951.602	20,886	111.327		
1878	652,417	3,970.490	23,155	125.642		
1879	1,348,000	8,208.330	23,018	127.640		
1880	1,676,000	10,181.050	16,328	100.215		
1881	768,302	4,695.240	9,589,308	44,368.436		
1882	1,160,000	7,022.970	2,021,732	9,302.365		
1883			3,244,726	15,102.415		
1884	545,000	3,299.955	3,977,777	19,069.284		
1885	360,000	2,238.735	2,510,871	11,811.580		
1886	224,000	1,378.200	2,237,431	10,952.170		
1887	356,000	2,195.850	2,711,747	13,334.436		
1888	720,000	4,407.170	8,133,604	40,812.770		
1889	456,000	2,801.290	699,567	3,511.745		
1890	536,000	3,284.660	5,698,429	28,922.261	510,000	2,603.150
1891			9,048,009	45,903.000		
1892	160,000	981.085	1,642,736	7,470.665		
1893	100,000	624.975	3,571,975	17,974.340	1,770,000	8,960.905
Total	11,183,585	68,143.847	55,227,299	269,295.227	2,280,000	11,564.055

Years.	Medio duros.		Coins of 20 reales or duros.	
	Number.	Weight.	Number.	Weight.
		Kilograms.		*Kilograms.*
1868 to 1885				
1886			100,000	2,666.300
1887			11,935,831	314,401.985
1888			5,800,000	152,920.770
1889			4,179,194	110,441.610
1890	510,000	6,551.545	3,500	92.280
1891	1,406,000	18,078.115	3,715	98.810
1892	74,000	948.840		
1893	812,000	10,362.780		
Total	2,802,000	35,941.280	22,022,240	580,621.755

SWEDEN.

LEGATION OF THE UNITED STATES,
Stockholm, February 6, 1896.

SIR: Thinking that inclosed clipping may be of interest to the Treasury Department, I have the honor to forward it, with translation.

I have the honor, etc.,

T. B. FERGUSON.

Hon. RICHARD OLNEY,
Secretary of State, Washington, D. C.

[Translation.]

COINING OF SILVER COIN.

While sanctioning the proposition of the director of the mint on the coining of 200,000 kronor in pieces of 25 öre, and of 200,000 kronor in pieces of 10 öre, His Royal Majesty has authorized the dirctor of the mint to make an agreement with the bank deputies of the Government Bank for the mint to purchase the old demonetized silver coin, at a nominal value of about 44,000 kronor, stored at the Government Bank, for a price corresponding to the average of the notes on silver prices quoted at the London Exchange from January 1 to December 31, 1895, with an addition of 1¼ per

cent to the average price thus obtained; and also to buy up the silver possibly required for this coining beyond the quantity found in the above-mentioned demonetized silver coin, the purchase to be effected in the way prescribed in the statute regarding the purchase and contract system of the State for purchases for State requirements.

LEGATION OF THE UNITED STATES,
Stockholm, February 14, 1896.

SIR: Referring to my No. 99, February 6, 1896, I have the honor to report for the information of the Treasury Department, that the price of 78.58 kronor per kilo of fine silver has been fixed by the bank deputies for the silver in damaged coins stored in the Riks Bank to be used for recoining by the mint.

I have the honor to be, sir, your obedient servant,

T. B. FERGUSON.

Hon. RICHARD OLNEY,
Secretary of State, Washington, D. C.

[See letter under head of Norway dated June 3, 1896.]

[Translation.]

Replies to interrogatories, 1895.

(1) The following gold coin was coined in 1895:

	Kronor.
134,660 pieces of 20 kronor	2,693,200
65,352 pieces of 10 kronor	653,520
Total	3,346,720

No Swedish or foreign gold coin has been melted and recoined.

(2) During the same year there was no coining of silver. An amount of 2,949.35 kronor of worn and damaged silver small coin has been called in and smelted. No foreign silver coin has been smelted.

(3) The weight of the fine gold which was used in 1895 for the making of gold objects may be calculated at 337 kilos, and then imported gold objects must be added containing fine gold, 23 kilos; total, 360 kilos. The weight of the fine gold employed for gilding and other trades is unknown.

(4) Of the fine gold employed for the making of gold objects, about half may be supposed to have been new gold. The rest has mostly consisted in gold coin and a small portion of old gold objects.

(5) The weight of the fine silver employed in 1895 for the making of silver objects may be estimated at 2,150 kilos, to which imported silver objects containing fine silver ought to be added, 1,022 kilos; total, 3,172 kilos. The weight of the fine silver employed for silvering and other trades is unknown.

(6) The fine silver employed for the making of silver objects may be supposed to have consisted principally in new silver.

(7) Imported gold:

Coined gold	kronor..	42,987
Gold in bullion	kilograms..	89
Worked gold	do....	92

There has been no export in 1895 of gold, coined bullion, or worked. The statistical reports give no information on the import and export of gold ore, as this article is classified under the general head, "Minerals nonspecified."

(8) Imported and exported silver:

Imported:		
Coined silver	kronor..	423,481
Silver in bullion	kilograms..	3,050
Worked silver	do....	1,543
Exported:		
Coined silver (can not be exactly stated).		
Silver in bullion	kilograms..	751
Worked silver	do....	10

The statistical reports give no information on the import and export of silver ore, as this article is classified under the general head, "Minerals nonspecified."

(9) The official reports which may be consulted make no statement as to whether the import of gold coin has consisted in American coin, nor to what extent.

(10) No import of gold has taken place from the United States.
(11) No American gold coin was left with the Royal mint for smelting.
(12) Production from the mines of the country, 78.591 kilos fine gold, at a value of 194,905.68 kronor.
(13) Production, silver: 1,186.840 kilos fine silver, at a value of 93,261.89 kronor (according to the average price of 1895, 78 kronor 58 ore per kilo).
(14 and 15) There were no refining furnaces in Sweden in 1895.
(16) The gold coined up to the close of 1895 amounted to 61,804,000 kronor. The diminishing of this amount by export to foreign countries and by being used in the trades can not be stated. Only a small quantity of gold coin is circulating. In all the Swedish banks and at the mint the following amounts in gold were found at the close of 1895:

	Kronor.
Gold coin passed as legal tender	25,136,885
Bullion and foreign gold coin	6,726,315
Total	31,863,200

(17) The stock of small silver coin found in the banks and at the mint on December 31, 1895, was 2,132,000 kronor, and in circulation, 15,895,000 kronor; total, 18,027,000 kronor. At the above-named places 110,000 kronor in demonetized Swedish silver coin and bullion were found at the same date.
(18) The Government does not issue any notes.
(19) Of the notes circulating at the close of 1895, those of the Government bank represented a value of 56,737,254 kronor, and those of private banks 60,882,996 kronor; total, 117,620,250 kronor.
(20) See answer of question 18.
(21) At the close of 1895 the amount of notes in circulation which were not covered by gold amounted to 85,899,388 kronor, which were balanced by silver and by native and foreign bonds.
(22) The metallic standard is gold. Small money is coined of silver and bronze. There are no notes which can not be cashed.
(23) There is no agio for gold.
(24) Average rate of exchange on London during 1895, 18 kronor 17 ore.
(25) During the year 1895 no other statutes have been issued concerning the coin and money system of Sweden, except the Royal proclamation, of which a copy in print is annexed.
(26) The report of the Director of the Mint is not published in print.

SWITZERLAND.

LEGATION OF THE UNITED STATES,
Berne, February 25, 1896.

SIR: In compliance with the instructions from the State Department of the date of February 4, 1896, I have the honor to report to you that I have obtained from the department of finance of the Swiss Confederation answers to the 26 questions in regard to the coinage and production of gold and silver and the movement of the currency in the Swiss Confederation for the calendar year 1895, which answers, with a translation thereof, I herewith inclose, as also the printed inclosure accompanying said answers.

Most respectfully, your obedient servant,

JOHN L. PEAK.

The DIRECTOR OF THE MINT, *Washington, D. C.*

[Translation.]

SWISS FEDERAL DEPARTMENT OF FINANCE,
Berne, February 22, 1896.

SIR: We have the honor to answer herewith the questions, as far as possible, contained in the circular letter submitted to us with your esteemed favor of 17th instant:

Replies to interrogatories, 1895.

(1) During the calendar year 1895 Switzerland has coined in gold 200,000 20-franc pieces, amounting to 4,000,000 francs.
(2) During the calendar year 1895 no new coinage of silver took place, whereas 46,000 old 5-franc pieces (silver) were recoined to the amount of 230,000 francs.
(3, 4, 5, and 6) We refer to our answer of last year under 3 and 4, viz, "The value

of gold and silver used in the industrial arts controlled by the official bureaus amounts to 40,000,000 francs, according to the estimation of the federal office, for gold and silver ware, whereby it appears that by far the larger part is due to the gold. The other precious metals used for same purposes represent also a very large sum, but the amount can not be given. The weight of the controlled gold and silver can not be stated, as the federal control has no fiscal character, and the tax is levied not on the weight, but on the number of the controlled objects, whereby the watch industry is especially taken into consideration."

(7, 8, 9, and 10) The imports and exports of gold and silver in 1895 have been as follows:

GOLD.

Description.	Imports.			Exports.		
	Weight.	Unit of value.	Total value.	Weight.	Unit of value.	Total value.
	Kilograms.	*Francs.*	*Francs.*	*Kilograms.*	*Francs.*	*Francs.*
Wrought	5,824	(1)	.....	1,093	3,286	3,591,738
Coined	6,471	.....	20,060,856	5,523	3,100	17,121,038

SILVER.

Wrought	55,440	(2)	.....	9,705	115	1,118,258
Coined	221,016	.....	44,203,403	19,734	200	23,946,875

[1] The unit of value of manufactured gold imported was in 1893, 3,450 francs, and in 1894, 3,545 francs; it is not given for 1895.

[2] The unit of value of wrought silver in 1893 was 133.26 francs, and in 1894, 106 francs; it is not given for 1895.

The imports of gold coin from the United States amounted to 8,000 francs and the exports of gold coin to the United States to 3,000 francs. To the figures contained in the tables aforesaid our Bureau of Commercial Statistics has the following to say:

"To the interrogatories 7 and 8 it is to be observed that the separation has reference only to the coined or uncoined metal, and not to bullion or ore. The latter were, if they should occur at all, to be looked for under the bullions (Tariff Nos. 319 and 321). The coins, as to their nationalities at the import and export, are also not separated. Coins coming to Switzerland from the United States as leaving the same may be limited to the cash of American travelers and a few small shipments by banks. As this tariff can not be ascertained the interrogatories 9 and 10 can not be answered. The value of import for gold and silver (Tariff Nos. 319 and 321) is at this time not yet settled. The import value of gold (No. 319) will not differ much from last year, but silver (No. 32) no doubt will increase from 106 francs to about 109 or 110 francs."

(11) The Swiss Federal mint has not melted any gold coin of the United States.

(12, 13, 14, and 15) At this time Switzerland has only one mine in which precious metal is produced, namely, the one of Gondo, in the Canton of Valais. The amount of the gold produced there is but very little, so that it will not come into consideration for an international statistic. Moreover, we have no certain estimates of this gold production.

(16 and 17) Same answers as last year to the interrogatories 13 and 14: "There exist no complete statistics. The total stock of specie in the Swiss banks of issue in 1894 kept continually increasing. The average was greater by about 3,000,000 francs than in the previous year. The maximum amount during the year was 99,755,000 francs, against 95,343,000 in 1893. The composition of the stock of specie, with respect to the metal, averaged as follows during the year: 77,190,000 francs, or 83.5 per cent, in gold, and 15,302,000 francs, or 16.5 per cent, in silver, against 70,465,000 francs, or 78.8 per cent, in gold, and 18,948,000 francs, or 21.2 per cent, in silver in 1893."

In reference to the ready cash of the Swiss emission banks we refer to the report from the Federal inspectory of bank notes, page 32:

"The total stock of specie in the Swiss banks of issue averaged in 1895, 93,649,000 francs, an increase of 1,200,000 francs as compared with the previous year. The maximum stock during the year was 98,417,000 francs, against 99,755,000 francs in 1894, a decrease of one and one-third million francs; while the maximum of 1895, viz, 90,461,000 francs, was higher than that of 1894 by 1,100,000 francs.

"The total average stock of specie in 1895 consisted of 82,667,000 francs, or 88.3 per cent, of gold, and 10,982,000 francs, or 11.7 per cent, of silver.

"In 1894 the total average stock of specie consisted of 77,190,000 francs, or 83.5 per cent, of gold, and 15,302,000 francs, or 16.5 per cent, of silver coins. The gold stock increased, therefore, in 1895 by 4.8 per cent at the expense of the silver stock."

GENERAL SITUATION OF THE SWISS BANKS OF ISSUE AT THE END OF THE YEAR 1895.

	Issue.	Actual note circulation.	Uncovered note circulation.	Total stock of specie.	Official rate of discount.
1895.	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Per cent.*
Average	185,834,000	167,913,000	74,264,000	[1]93,649,000	3.27
Maximum	195,800,000	185,146,000	92,499,000	98,417,000	4.50
Minimum	181,356,000	154,264,000	58,204,000	90,461,000	2.50
1894.					
Average	180,585,000	158,719,000	66,227,000	[2]92,492,000	3.17
Maximum	182,900,000	175,111,000	81,048,000	99,755,000	4.00
Minimum	178,838,000	147,687,000	55,156,000	89,314,000	3.00

[1] 82,667,000 gold francs = 88.3 per cent; 10,982,000 silver francs = 11.7 per cent.
[2] 77,190,000 gold francs = 83.5 per cent; 15,302,000 silver francs = 16.5 per cent.

(18, 20, and 21) We refer here to former information given concerning the bank-note business in Switzerland.

(19) The amount of notes outstanding December 31, 1895, i. e., in the hands of the people, of the 34 emission banks was 174,872,000 francs.

(22) The standard existing in Switzerland is the double standard, determined by the Latin Union, which Switzerland has joined.

(23) No. Gold is not at a premium as compared with the actual currency of the country.

(24) Average rate of exchange on London during the year, 25.33.

ANNUAL AVERAGE OF THE RATE OF DISCOUNT.

Year.	Switzerland.	France.	Germany.	Belgium.	England.
	Per cent.	*Per cent.*	*Per cent.*	*Per cent.*	*Per cent.*
1887	2.91	3	3.40	3.06	3.38
1888	3.18	3.10	3.83	3.27	3.30
1889	3.70	3.10	3.68	3.54	3.56
1890	3.88	3	4.52	3.20	4.55
1891	3.92	3	3.76	3	3.28
1892	3.09	2.69	3.20	2.70	2.53
1893	3.37	2.50	4.07	2.83	3.05
1894	3.17	2.50	3.12	3	2.12
1895	3.27	2.10	3.14	2.60	2

The table following shows the course of exchange for bills (short) on France, London, Germany, and Italy during the last seven years (average quotation of the cities of Basel, Geneva, and Zurich).

COURSE OF EXCHANGE FOR SHORT BILLS.

Country.	Year.	Average.	Minimum.	Maximum.
On France	1889	100.14	99.90	100.32
	1890	100.16	100	100.32
	1891	100.22	100	100.45
	1892	100.10	99.85	100.31
	1893	100.13	99.90	100.39
	1894	100.04	99.89	100.26
	1895	100.10	99.85	100.34
On London	1889	25.25	25.17	25.39
	1890	25.27	25.14	25.42
	1891	25.29	25.19	25.43
	1892	25.18	25.10	25.27
	1893	25.21	25.07	25.38
	1894	25.16	25.08	25.25
	1895	25.24	25.13	25.33
On Germany	1889	123.59	123.12	124.27
	1890	123.93	123.40	124.75
	1891	124.25	123.80	124.65
	1892	123.54	123.30	124.05
	1893	123.63	123.15	124.25
	1894	123.38	123.12	123.66
	1895	123.51	123.10	123.90
On Italy	1889	99.26	97.50	99.97
	1890	98.89	98	99.55
	1891	98.49	96	99.50
	1892	96.35	94.50	97.60
	1893	92.58	85.70	96.25
	1894	89.69	86.08	93.77
	1895	94.45	91	96.10

(25) No laws were passed during the year 1895 affecting the coinage, issue, or legal tender character of the metallic or paper currency.

(26) The report of the Federal mint administration for the year 1895 can be found in Inclosure V, page 47, herewith.

HAUSER.

Hon. JOHN L. PEAK,
United States Minister, Berne, Switzerland.

URUGUAY.

[Translation.]

MINISTRY OF FOREIGN AFFAIRS,
STATE AUDITOR'S OFFICE, FIRST SECTION,
Montevideo, April 6, 1896.

MOST EXCELLENT SIR: The questions that this office can answer in the present case are mentioned below, and with them your excellency will find the corresponding answers.

Replies to interrogatories, 1895.

(1) During the year 1895 there has not been coined or recoined any money of gold.

(2) There was imported $1,000,000 in silver money of national coin of the value of $1 each, coined in Buenos Ayres. There was no recoinage of any.

(3 and 4) I do not possess the data and have no basis upon which to calculate the weight of fine gold, either old or new, used in the industrial arts during the calendar year 1895.

(5) The value of silverware imported in 1895 was $3,351; do not know the quantity employed in that year in the industrial arts.

(6) Have no data in respect to the amount of old or new silver used in the industrial arts during 1895.

(7) Import of gold: In bars and ingots the amount is not known. The importation of metallic money in 1895 was $8,499,934, and the exportation was $3,241,237. The exportation of gold extracted from our mines is made in rough gold, not refined, having been in 1895, 61 kilograms and 126 grams, with a commercial value of $27,041.32.

(8) No silver mines are worked in the country.

(9, 10, and 11) Have no data as to the import of United States gold or gold coin, or of the amount of United States gold coin deposited at the mints and melted during 1895.

(12) This was answered in reply to seventh question.
(13) This was answered in reply to eighth question.
(14 and 15) There are no refineries in the country, and the gold that is extracted is exported in the rough, according to the answer to the seventh question.
(16 and 17) There are no data from which to calculate the stock of coined gold and in bars. The stock of coined silver is $4,045,857. Amount in bars is unknown.
(18) There are no notes emitted by the Superior Government.
(19) The bank notes outstanding amount to $3,474,970 between the only two banks.
(20) There are no Government notes.
(21) The amount of uncovered bank notes: The sum mentioned in the answer to question 19.
(22) Do not know the amount of the circulation of gold coin in the country. That of silver is $4,045,857. There is no inconvertible paper.
(23) The premium on gold in relation to the silver can be fixed at an average of 1¼ per cent.
(24) The banks' rate of exchange at ninety days' sight was: Lowest, 51¼; highest, 52. The commercial rate was 51⅜ and 52 1/16, respectively.
(25) No laws respecting finance have been passed.
(26) There is no mint in the Republic.
Having complied with the request, it only remains for me to salute your excellency, whom may God guard for many years.

HONORÉ ROUSTAN.

Hon. GRANVILLE STUART.

VENEZUELA.

BANKING FACILITIES.

[From the Monthly Bulletin of the Bureau of the American Republics, December, 1895, pages 370-371.]

The want of banking facilities is often keenly felt. The two banks of Caracas and that of Maracaibo are the only institutions of the kind in the country, and with agencies limited as to the places and transactions, have, under prudent management, proven very profitable and beneficial to the business interest of the country. The want of such institutions in agricultural districts is generally recognized and deplored, and I can suggest no more profitable undertaking than one of this character, based on large capital and commercial standing. Large planters often require ready money to carry on their operations, and are compelled to resort either to the large merchant or the usurer. In either case he pays a rate of interest seldom less than 12 per cent, and not unusually 18 per cent per annum. If he deals with the former, he may be expected to purchase his supplies from him, paying a large profit on the sale. The planter's paper and collateral are unquestioned.

Often strangers with the best bills of credit find themselves remote from these legitimate institutions, and are forced to submit to such a rate of exchange as the merchant may exact.

Attempts have at various times been made to obtain banking concessions, but always accompanied with such conditions as to make their denial necessary and imperative.

American capital invested in banks would be as safe and secure as at home. An American bank and American business houses are the only factors that will loosen the grip of European exporters.

FINANCE AND CURRENCY.

All values in this country are based on gold—gold of all nations being current as a commodity. Silver of other countries is forbidden circulation, but that of Venezuela is on a parity with its gold and is accepted in payment of all dues, public and private, and without loss. This is due to the fact that at present no silver is coined and never has been in excess of the Government's ability to redeem it in gold. It is generally understood that were this limit of ability passed, the same conditions would exist here that prevail in all other South American Republics, namely, silver would be at a large discount, and the poorer classes would suffer in the payment of their dues. Venezuela is therefore proud of the standing its silver coin has among the nations of the world.

The last Congress prohibited the emission of paper money by the Government. The paper money in circulation is that of the banks at Caracas and Maracaibo, the only institutions authorized to issue paper money. For this money the Government is in nowise responsible, its acceptance not being compulsory, and it circulates only on the credit and integrity of the banks and in their own vicinity. Its issue is very limited.

SITUATION OF THE PRINCIPAL BANKS OF ISSUE ON MARCH 31, 1896.

Names of banks.	Metallic reserve.	Analysis of the reserve.		Bills payable to bearer in circulation.
		Gold.	Silver.	
	Francs.	*Francs.*	*Francs.*	*Francs.*
Imperial Bank of Germany	1,099,600,000	.....	.....	1,560,600,000
Bank of Austria-Hungary	819,000,000	550,800,000	268,200,000	1,173,500,000
National Bank of Belgium	99,600,000	.....	.....	445,400,000
National Bank of Bulgaria[1]	6,900,000	.....	.....	1,500,000
National Bank of Denmark	77,700,000	77,700,000	.....	108,400,000
Bank of Spain	461,200,000	200,100,000	261,100,000	1,007,200,000
Bank of Finland[2]	25,000,000	22,100,000	2,900,000	57,600,000
Bank of France	3,197,900,000	1,051,000,000	1,246,900,000	3,651,000,000
National bank of Greece[2]	1,700,000	.....	.....	109,100,000
Italy:				
Bank of Italy	368,500,000	312,300,000	56,200,000	800,900,000
Bank of Naples[3]	116,000,000	105,500,000	10,500,000	240,600,000
Bank of Sicily[3]	36,700,000	35,200,000	1,500,000	53,600,000
Bank of Norway[2]	31,100,000	31,100,000	.....	66,200,000
Bank of the Netherlands	241,900,000	66,200,000	175,700,000	410,600,000
Bank of Portugal	68,500,000	26,700,000	41,800,000	296,000,000
National Bank of Roumania	58,500,000	54,500,000	4,000,000	115,300,000
United Kingdom:				
Bank of England	1,176,500,000	1,176,500,000	.....	668,300,000
Banks of Scotland[4]	133,900,000	117,600,000	16,300,000	168,700,000
Banks of Ireland[4]	81,900,000	74,500,000	7,400,000	155,500,000
Imperial Bank of Russia	2,160,000,000	2,130,400,000	29,600,000	4,227,300,000
Bank of Servia	10,100,000	5,400,000	4,700,000	22,200,000
Sweden:				
Royal Bank[2]	37,800,000	33,900,000	3,900,000	56,800,000
Private banks[2]	30,600,000	10,400,000	20,200,000	87,600,000
Swiss banks of issue[2]	94,600,000	83,700,000	10,900,000	181,600,000
Imperial Bank of Turkey[5]	38,900,000	.....	.....	15,000,000
Associated banks of New York	294,500,000	.....	.....	71,000,000

[1] Situation on February 15. [2] Situation on February 29. [3] Situation on March 20.
[4] Situation on February 22. [5] Situation on January 31.

SITUATION OF THE PRINCIPAL BANKS OF ISSUE ON JULY 31, 1896.

Names of banks.	Metallic reserve.	Analysis of the reserve.		Bills payable to bearer in circulation.
		Gold.	Silver.	
	Francs.	*Francs.*	*Francs.*	*Francs.*
Imperial Bank of Germany	1,089,600,000	.....	.....	1,537,500,000
Bank of Austria-Hungary	842,100,000	572,000,000	270,100,000	1,212,700,000
National Bank of Belgium	103,300,000	.....	.....	442,300,000
National Bank of Bulgaria[1]	5,200,000	.....	.....	2,200,000
National Bank of Denmark[2]	92,500,000	92,500,000	.....	126,400,000
Bank of Spain	497,600,000	210,100,000	287,500,000	1,053,200,000
Bank of Finland[2]	24,700,000	21,900,000	2,800,000	59,700,000
Bank of France	3,298,200,000	2,041,200,000	1,257,000,000	3,615,900,000
National Bank of Greece[2]	1,800,000	.....	.....	101,600,000
Italy:				
Bank of Italy	358,600,000	302,900,000	55,700,000	760,400,000
Bank of Naples[3]	116,000,000	105,500,000	10,500,000	254,500,000
Bank of Sicily[3]	36,700,000	35,200,000	1,500,000	55,500,000
Bank of Norway[2]	33,400,000	33,400,000	.....	72,600,000
Bank of the Netherlands	241,900,000	66,400,000	175,500,000	424,800,000
Bank of Portugal	73,500,000	26,700,000	46,800,000	313,200,000
National Bank of Roumania	63,400,000	58,400,000	5,000,000	119,900,000
United Kingdom:				
Bank of England	1,212,100,000	1,212,100,000	.....	699,100,000
Banks of Scotland[4]	143,600,000	.....	.....	168,800,000
Banks of Ireland[4]	79,200,000	.....	.....	160,100,000
Imperial Bank of Russia	2,328,600,000	2,283,400,000	45,200,000	4,205,700,000
Bank of Servia	10,500,000	5,600,000	4,900,000	21,100,000
Sweden:				
Royal Bank[2]	37,800,000	33,700,000	4,100,000	73,900,000
Private banks[2]	24,200,000	10,500,000	13,700,000	85,900,000
Swiss banks of issue	94,000,000	85,900,000	8,100,000	188,300,000
Imperial Bank of Turkey[2]	38,400,000	.....	.....	15,200,000
Associated banks of New York	309,500,000	.....	.....	73,000,000

[1] Situation on June 14. [2] Situation on May 31. [3] Situation on June 20. [4] Situation on May 18.

SITUATION OF THE PRINCIPAL BANKS OF ISSUE ON SEPTEMBER 30, 1896.

Names of banks.	Metallic reserve.	Analysis of the reserve.		Bills payable to bearer in circulation.
		Gold.	Silver.	
	Francs.	*Francs.*	*Francs.*	*Francs.*
Imperial Bank of Germany	1,018,700,000			1,571,700,000
Bank of Austria-Hungary	879,300,000	611,300,000	268,000,000	1,326,600,000
National Bank of Belgium	101,500,000			443,100,000
National Bank of Bulgaria[1]	10,100,000			3,200,000
National Bank of Denmark	78,700,000	78,700,000		113,800,000
Bank of Spain	472,700,000	213,200,000	259,500,000	1,066,000,000
Bank of Finland	25,100,000	22,000,000	3,100,000	62,400,000
Bank of France	3,300,300,000	2,046,000,000	1,254,300,000	3,536,400,000
National Bank of Greece[2]	1,800,000			106,800,000
Italy:				
Bank of Italy	370,200,000	305,500,000	64,700,000	780,500,000
Bank of Naples[3]	116,200,000	105,600,000	10,600,000	232,600,000
Bank of Sicily[2]	36,700,000	35,200,000	1,500,000	59,400,000
Bank of Norway[2]	41,900,000	41,900,000		74,900,000
Bank of the Netherlands	237,300,000	66,400,000	170,900,000	421,200,000
Bank of Portugal	75,500,000	26,700,000	48,800,000	319,400,000
National Bank of Roumania	65,500,000	64,000,000	1,500,000	152,900,000
United Kingdom:				
Bank of England	1,009,600,000	1,009,600,000		700,800,000
Banks of Scotland[4]	147,500,000	136,500,000	11,000,000	192,500,000
Banks of Ireland[4]	75,000,000	65,400,000	9,600,000	155,000,000
Imperial Bank of Russia	2,262,100,000	2,229,100,000	33,000,000	4,285,000,000
Bank of Servia	11,000,000	6,000,000	5,000,000	24,200,000
Sweden:				
Royal Bank[2]	37,200,000	33,600,000	3,600,000	75,700,000
Private banks[2]	25,900,000	10,600,000	15,300,000	90,500,000
Swiss banks of issue	94,800,000	86,400,000	8,400,000	194,000,000
Imperial Bank of Turkey[5]	38,000,000			15,500,000
Associated banks of New York	279,000,000			100,000,000

[1] Situation on September 7. [2] Situation on August 31. [3] Situation on September 20.
[4] Situation on July 11. [5] Situation on July 31.

EUROPEAN RATES OF DISCOUNT (PER CENT) PER ANNUM, 1895.

[From The Economist, London, February 22, 1896, pages 4 and 5, supplement.]

Cities.	Beginning of months of 1895.												
	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Average.
London:	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*
Bank rate	2	2	2	2	2	2	2	2	2	2	2	2	2
Open market	0⅝	0⅞	1⅛	0 13/16	0 13/16	0¾	0 9/16	0 9/16	0⅝	0 9/16	0¾	0 15/16	0.80
Paris:													
Bank rate	2½	2½	2½	2	2	2	2	2	2	2	2	2	2.10
Open market	2	2⅞	1½	1⅝	1¾	1⅝	1⅝	1	1	1¾	1⅞	1¾	1.59
Vienna:													
Bank rate	4	4	4	4	4	4	4	4	4	5	5	5	4.31
Open market	3⅝	3½	3⅝	3⅞	3⅞	3⅞	3⅞	3⅞	3⅞	4⅞	5	4½	4.07
Berlin:													
Bank rate	3	3	3	3	3	3	3	3	3	3	3	4	3.06
Open market	1⅝	1⅞	1¼	1½	1½	1⅞	1¾	1½	2	2¼	2½	3⅛	2.01
Frankfort:													
Bank rate	3	3	3	3	3	3	3	3	3	3	3	4	3.13
Open market	1⅝	1¼	1¼	1⅝	1½	1¾	1¾	1½	2	2½	2½	3½	2.05
Amsterdam:													
Bank rate	2½	2½	2½	2½	2½	2½	2½	2½	2½	2½	2½	2½	2.69
Open market	1¾	1½	1⅝	1¼	1⅝	1½	1½	1¼	1	1¼	1½	1⅝	1.51
Brussels:													
Bank rate	3	3	3	2½	2½	2½	2½	2½	2½	2½	2½	2½	2.61
Open market	1½	1½	1½	1⅝	1¼	1¾	1¾	1¾	1½	1¾	1½	1½	1.54
Hamburg:													
Bank rate	3	3	3	3	3	3	3	3	3	3	3	4	3.13
Open market	1⅝	1⅞	1¼	1½	1½	1⅞	1¾	1½	1⅞	2¼	2⅜	3½	2.00
St. Petersburg:													
Bank rate	6	6	6	6	6	6	6	6	6	6	6	6½	6.08
Open market	5½	6	5½	5½	5½	5½	5½	5½	5½	5	5	6½	5.63

LII.—MONETARY SYSTEMS OF THE PRINCIPAL COUNTRIES OF THE WORLD.

ARGENTINA.

Up to 1881 the Argentine Republic had a very incoherent monetary system. The peso fuerte of 8 reals, which was divided into centavos, or cents, continued to be the unit of account of the country; but this unit was represented, at least in the provinces of Buenos Ayres and Corrientes, only by paper money, which fluctuated greatly in value. In Buenos Ayres, side by side with the peso papel, or paper peso, created by the State in 1825, and which, in consequence of continued depreciation, came to be worth only the one twenty-fifth of the metallic piaster, there were in circulation notes issued by the bank of the province, which had forced currency to a value varying from par to 30 per cent below it.

In Corrientes another paper peso issued by the provincial government underwent similar fluctuations of price.

Apart from this paper money and the metallic piasters, which still circulated to a limited extent in the other provinces of the Argentine Republic, commercial transactions were carried on in foreign coins.

During the course of the year 1875 the Congress of the Republic, desiring to put an end to a state of things so prejudicial to all interests, provided for the stamping of national coins, based on the peso fuerte or patacon, with a fineness of 0.900, to weigh 1½ grams, divided into centavos. This coinage was to embrace; In gold pieces, 5, 10, and 20 piasters; in silver, a 1-piaster piece, fineness of 0.900, weight 25 grams, with decimal divisions of a proportional weight. Nickel and bronze pieces completed the series of new coins. The economical and financial condition of the country, however, did not allow the law of 1875 to be carried out, and not until six years after was the monetary reform resumed with better chances of success.

The law of November 5, 1881, retained the gold piaster, divisible into centavos as the monetary unit, but lowered its weight to 1.6189 grams, the exact weight of the French 5-franc gold piece. The same law definitively regulated the mintage of Argentine coins as shown below.

Argentine gold coins are full legal tender. Silver coins are legal tender only to the amount of 10 pesos, and bronze coins to the amount of 1 peso.

Since the 16th of July, 1883, all the accounts of the Government and banks are settled in national pesos or piasters. In 1884, the Argentine Republic had a metallic stock of 48,000,000 pesos, 22,000,000 of which were in circulation. While formally adopting the double standard, the Argentine law of 1881 restricted the coinage and use of silver as legal tender, and the metallic standard may, therefore, be said to be gold. The country, however, is frequently classed as a double-standard country.

The actual currency is depreciated paper, fluctuating greatly in value. Gold is quoted at so much premium; for instance, 180 premium—that is, $280 paper to $100 gold.

Gold is also quoted in paper pesos per ounce, and, indirectly, through the price of the sovereign, in paper pesos. Thus, if sovereigns are given at 16.48, the gold dollar is $\frac{16.48}{5.04} = 326.98$ pesos, i. e., gold is 227 premium.

The coins of the Argentine Republic provided for by law are as follows:

GOLD.

Denomination.	Weight.	Fineness.	Pure gold contained.	Value in United States gold coin.
	Grains.	*Thousandths.*	*Grains.*	
Argentine	124.451	900	112.006	$4.823
Half argentine	62.225	900	56.003	2.411

SILVER.

Denomination.	Weight.	Fineness.	Pure silver contained.	Value compared with silver in United States silver dollar.
	Grains.	*Thousandths.*	*Grains.*	
Peso	385.800	900	347.220	$0.935
50 centavos	192.900	900	173.610	.468
20 centavos	77 160	900	69.444	.187
10 centavos	38.580	900	34.722	.094
5 centavos	19.290	900	17.361	.047

AUSTRIA-HUNGARY.

MONETARY SYSTEM UNTIL THE RECENT CURRENCY REFORM.

The monetary system established in Austria-Hungary by the imperial patents of September 19, 1857, April 27, 1858; the laws of December 24, 1867, March 9, 1870, and May 21, 1887, was the silver monometallic, with the florin of 100 kreutzers as the monetary unit.

The silver coins were: The 2-florin piece, 0.900 fine, containing 22.222 grams of fine silver; the 1-florin piece, 0.900 fine, containing 11.111 grams of fine silver; the quarter-florin piece, 0.520 fine, containing 2.778 grams of fine silver.

The silver divisional coins of Austria-Hungary were: The 20-kreutzer piece, 0.500 fine, containing 1.333 grams fine; the 10-kreutzer piece, 0.400 fine, containing 0.6667 grams fine.

These pieces were legal tender among private persons to the amount of 2 florins.

The silver trade coins were the Maria-Theresa or Levantine thalers, fineness 0.833⅓, containing 23.3890 grams of pure silver.

The gold trade coins were the quadruple ducat and ducat, the latter weighing 3.4909 grams, 0.986⅓ fine, and containing 3.4424 grams of pure gold; also the 8-florin and 4-florin pieces, equal in value to the French 20-franc and 5-franc pieces, respectively.

The gold ducats were not legal tender. The coinage charges were: One-half per cent for the ducats, 8-florin, and 4-florin pieces; 1 per cent for the 2-florin and 1-florin pieces; 2½ per cent for the quarter-florin pieces; 1½ per cent for the Maria-Theresa thalers.

The coinage of silver on private account was suspended in January, 1879.

But while Austria-Hungary has been legally a country with the single silver standard, practically it has had no metallic money in circulation. For nearly half a century it has, with the exception of about eight months, had nothing but an irredeemable paper currency, issued by the Austro-Hungarian Bank in denominations of 10,100, and 1,000 florins, and by the treasury of 1, 5, and 50 florins. For a long series of years there was a premium on silver, but since the end of 1878 silver and paper have been at par. The value of the silver florin, owing to the limitation of the coinage of silver, was considerably greater than that of the pure metal it contains.

THE RECENT MONETARY REFORM OF AUSTRIA-HUNGARY.

The provisions of the recent Austro-Hungarian currency reform are embodied in six laws, the two most important of which are those on the new currency system and on the monetary treaty of Austria with Hungary. The other four are merely auxilliary to those two which contain the text of the new fundamental monetary law of the two countries. The four auxilliary laws are intended to fix the relative value of the gold florin to the new gold coins; to determine the changes which have become necessary in the bank act; to authorize the Government to raise a gold loan, and to provide for the conversion of certain 5 per cent bonds free of tax.

The new monetary system is gold monometallic and the gold crown of 100 hellers (farthings) the monetary unit. The new currency consists of gold, silver nickel, and bronze coins. The gold coins provided for are:

(1) The 20-crown piece, weighing 6.775067 grams of gold, 0.900 fine, or a fine weight of 6.09756 grams.

(2) The 10-crown piece, weighing 3.3875338 grams of gold, 0.900 fine, or of 3.04878 grams fine.

(3) Beside the gold coins above mentioned, there are to be coined as heretofore, and as trade coins, Austrian gold ducats. The 4 and 8 gulden gold pieces are to be no longer coined.

The coinage charge is 4 crowns for 1 kilogram of standard gold for the bank and 6 on individual account.

The new silver coin is the 1-crown piece, weighing 5 grams of silver, 0.835 fine, and containing 4.175 grams of pure metal.

The ratio of gold to silver in the new system is 1 to 13.69. Silver is coined only on account of the State.

Silver coins are unlimited legal tender to the State at their nominal value; to private parties, to the amount of 50 crowns.

The Levantine or Maria-Theresa silver thalers continue to be stamped as trade coins with the old weight and fineness.

The monetary agreement between Austria and Hungary provides that there shall be coined in all by the two countries 200,000,000 crowns in silver coins, of which Austria's share is 140,000,000 crowns.

The agreement is to remain in force until the end of 1910. Arrangements are to

be made at a proper time for the regulation of the fiduciary circulation and the resumption of specie payments.

Austrian paper money remains in circulation provisionally. The paper florin is, like the silver florin, worth 2 crowns.

The introduction of the coins of the new system will be made by degrees, in the course of several years, during which time the coins of the old silver standard as well as the State notes will remain current. The coins of the new system, multiplied by two, are of the same value as the pieces of the old silver and paper currency, 1 silver or paper florin, for instance, being equal to 2 crowns, and 1 kreutzer to 2 heller. The value of the new crown is $0.2026 against $0.482, the value of the gold florin.

The weight, etc., of the coins of the Austro-Hungarian Empire, expressed in grains, are as follows:

GOLD.

Denomination.	Weight.	Fineness.	Pure gold contained.	Value in United States gold coin.
	Grains.	*Thousandths.*	*Grains.*	
20-crown piece	104.553	900	94.097	$4.052
10-crown piece	52.276	900	47.049	2.026
4 ducats	215.497	986⅔	212.451	9.149
1 ducat	53.866	986⅔	53.112	2.287
Old system:				
8-florin piece	99.561	900	89.605	3.859
4-florin piece	49.780	900	44.802	1.929

SILVER.

Denomination.	Weight.	Fineness.	Pure silver contained.	Value, compared with silver in United States silver dollar.
	Grains.	*Thousandths.*	*Grains.*	
1-crown piece	77.160	835	64.428	$0.174
Old system:				
50-heller piece	38.580	835	32.214	.087
Maria-Theresa thaler (Levantine)	433.089	833⅓	360.763	.972
2 florins	381.035	900	342.932	.924
1 florin	190.517	900	171.465	.462
Quarter florin	82.434	520	42.866	.115
20-kreutzer piece	41.141	500	20.570	.055
10-kreutzer piece	25.709	400	10.285	.027

BELGIUM (See Latin Union).

BOLIVIA.

Bolivia has the single silver standard.

According to the law of June 29, 1863, the money of account of Bolivia is the boliviano, or silver peso, weighing 25 grams with a fineness of 0.900, and therefore equivalent to the French 5-franc piece. By virtue of a Presidential decree of 1889, the stamping of pieces of 1 boliviano was to amount to 8,300,000 bolivianos, and of divisional coins to about 3,000,000 bolivianos, with a fineness of 0.835; but this decree was subsequently modified, and for some years the mint has stamped only pieces of 20 and 50 centavos, 0.900 fine, as indicated in the table below.

In consequence of the scarcity of the larger pieces of 25 grams, the legal coin has come to be the 20-centavo piece, weighing 4.50 grams, and at present the boliviano really consists of 5 such pieces, so that this coin actually represents 20.25 grams fine.

The real monetary unit is, therefore, the one-fifth of the boliviano, 4.05 grams fine, and all transactions are carried on on that basis. The banks redeem their notes in no other coin, and exchange on Europe is measured in terms of the boliviano, weighing 20.25 grams fine.

The old pieces of 22½ grams fine have thus become trade coins, on which a premium of 8 per cent is paid for the reason that they contain 2.25 grams or 34.722 grains fine (8 per cent) more silver than is contained in five of the 20 centavo pieces.

The coinage of gold has long been suspended, and the old onzas and escudoes are no longer found in the country.

The Bank of Bolivia issues paper money redeemable on demand and generally on a par with silver.

The weight, fineness, etc., of the silver coins of Bolivia, are as follows:

Denomination.	Weight.	Fineness.	Pure silver contained.	Value, compared with silver in United States silver dollar.
	Grains.	*Thousandths.*	*Grains.*	
Boliviano	385.800	900	347.220	$0.935
50 centavos	192.900	900	173.610	.468
20 centavos	69.444	900	62.500	.168
10 centavos	32.715	900	29.444	.079
5 centavos	16.357	900	14.722	.039

BRAZIL.

In 1849 the gold standard was adopted by Brazil and the new coinage consists of pieces of 20, 10, and 5 milreis in gold, and 2, 1, one-half, one-fifth, and one-tenth milreis in silver.

The 20-milreis piece in gold weighs 5 oitavas, or 17.929 grams or 276.695 grains troy. It is 916⅔ fine. This gives a "mint par" between Brazil and England of 1 milreis, 26.93 pence, and makes the pieces of 20 milreis £2 4s. 10d. The other gold pieces in proportion. English sovereigns are valued at 8,890 reis gold (or 1 milreis 27d).

The silver money is not legal tender beyond 20 milreis.

The present money is, however, inconvertible paper, fluctuating in its value. In 1867 this paper was at a discount of 50 per cent; in 1868, 80 per cent discount; in 1875 it stood nearly at par with gold, but then fell to a discount of 25 per cent. In 1889 it rose to par again, and efforts were made to sustain it there, but they had to be abandoned. The Republic sanctioned large issues of paper money by banks, in consequence of which the milreis fell, in 1892, to 10d., from which quotation it has, however, risen again.

One thousand milreis are called a "conto;" 1,000 contos a "conto de contos."

The weight, etc., expressed in grains, of the Brazilian coins authorized by law, are as follows:

GOLD.

Denomination.	Weight.	Fineness.	Pure gold contained.	Value in United States gold coin.
	Grains.	*Thousandths.*	*Grains.*	
20 milreis	276.695	916⅔	253.637	$10.923
10 milreis	138.347	916⅔	126.818	5.462

SILVER.

Denomination.	Weight.	Fineness.	Pure silver contained.	Value compared with silver in United States silver dollar.
	Grains.	*Thousandths.*	*Grains.*	
2 milreis	393.516	916⅔	360.723	$0.972
Milreis	196.758	916⅔	180.361	.486
500 reis	98.379	916⅔	90.180	.243

BRITISH INDIA.

MONETARY SYSTEM.

The standard of this country is silver, and the monetary unit, the rupee, of the legal weight of 180 troy grains, fineness 916⅔, and containing 165 grains of pure silver.

There has been no change in the weight, fineness, or legal tender power of the silver coins of India during the last twenty years, or, indeed, since the law of August 17, 1835, which went into effect on September 1, 1835, establishing the present monetary system of that country, with the single silver standard. That law provided that the Company Rupee, the name which it introduced, should weigh a new East India thaler, or 180 grains, 11/12 or 916⅔ fine; that is, it should contain 165 grains of pure silver.

The act of the governor-general in council, June 26, 1893, did not change the weight, fineness, or legal-tender power of the rupee, although it closed the Indian mints to the free coinage of silver from and after the date of its passage. Silver, however, will still be coined in India on Government account, and the Government holds itself ready to furnish new rupees to individuals, in exchange for gold, at the rate of 1 silver rupee for 16 pence in gold, or 15 rupees for 1 pound sterling (93⅓ rupees are manufactured out of one kilogram of pure silver).

The silver coins are the one rupee, one-half rupee, one-quarter rupee, and one-eighth rupee pieces, all of the fineness of the rupee, and proportional to it in weight. Large payments are estimated in lacs of 100,000 rupees and in crores of 100 lacs. The rupee and the one-half rupee are unlimited legal tender, provided the coins have not lost more than 2 per cent in weight, and have not suffered deterioration otherwise than by abrasion. The quarter rupee and the eighth rupee are legal tender only to the amount of fractional parts of the rupee.

The gold coins are: The mohur, or 15-rupee piece, the 10- and 5-rupee pieces, and the double mohur, or 30-rupee piece. The weight of the mohur is 180 grains troy, 0.916⅔ fine, and contains 165 grains of pure gold. The other gold coins are of the same fineness as the mohur and have a weight proportional to it. Gold is not legal tender in India. There is a coinage charge of 1 per cent for gold. The ratio of gold to silver in coinage is 1 to 15.

The weight, fineness, etc., of the coins of British India are as follows:

GOLD.

Denomination.	Weight.	Fineness.	Pure gold contained.	Value in United States gold coin.
	Grains.	*Thousandths.*	*Grains.*	
Double mohur, 30 rupees	360.000	916⅔	330.000	$14.212
Mohur, 15 rupees	180.000	916⅔	165.000	7.106
Two-thirds mohur, 10 rupees	120.000	916⅔	110.000	4.734
One-third mohur, 5 rupees	60.000	916⅔	55.000	2.367

SILVER.

Denomination.	Weight.	Fineness.	Pure silver contained.	Value compared with silver in United States silver dollar.
	Grains.	*Thousandths.*	*Grains.*	
Rupee	180.000	916⅔	165.000	$0.444
One-half rupee	90.000	916⅔	82.500	.222
One-quarter rupee	45.000	916⅔	41.250	.111
One-eighth rupee	22.500	916⅔	20.625	.055

BULGARIA.

Bulgaria has the double standard.

The monetary system of Bulgaria was established by the law of May 27, 1880. The silver coins of the country are the same as those of France. The coinage of the 10 and 20 lev pieces provided for by that law, and which was to amount to 400,000 levs as a first issue, has not yet been made. In the meantime foreign gold coins have been officially rated as follows:

	Levs.		*Levs.*
The sovereign	20.00	The old imperial	20.50
20 German marks	24.50	The Turkish pound	22.70
20 francs	20.00	The Austrian ducat	11.60

The country has no mint; its silver pieces have been coined at St. Petersburg, Brussels, Kremnitz, and Birmingham.

The Bulgarian coins provided for by law of May 27, 1880, are as follows:

GOLD.

Denomination.	Weight.	Fineness.	Pure gold contained.	Value in United States gold coin.
	Grains.	*Thousandths.*	*Grains.*	
Alexander (20 levs)	99.561	900	89.605	$3.859

SILVER.

Denomination.	Weight.	Fineness.	Pure silver contained.	Value compared with silver in United States silver dollar.
	Grains.	*Thousandths.*	*Grains.*	
5 levs	385.800	900	347.220	$0.935
2 levs	154.320	835	128.857	.347
1 lev	77.160	835	64.428	.174
Half lev	38.580	835	32.214	.087

CANADA.

The Dominion of Canada comprises the united Canadas, New Brunswick, Nova Scotia, Great Britain, Prince Edward Island, Newfoundland, and British Columbia with Vancouver Island. The money of the Dominion is a gold standard, based upon the legal value of the pound sterling, equal to $4.86\frac{2}{3}$, or $1 equal to 49.316 pence.

The country has no gold coin of its own; silver is legal tender to the amount of $10 and bronze coins to the amount of 25 cents.

The value of the English silver coins in circulation has been officially fixed as follows: The crown, or 5 shillings, $1.20; the one-half crown, or $2\frac{1}{2}$ shillings, $0.60; the florin, or 2 shillings, $0.48; the shilling, $0.24; the one-half shilling, $0.12.

The weight, fineness, etc., of the silver coins of Canada are as follows:

Denomination.	Weight.	Fineness.	Pure silver contained.	Value compared with silver in United States silver dollar.
	Grains.	*Thousandths.*	*Grains.*	
50-cent pieces	179.320	925	165.871	$0.446
25-cent pieces	89.660	925	82.935	.223
10-cent pieces	35.864	925	33.174	.089
5-cent pieces	17.932	925	16.587	.044

CENTRAL AMERICA.

Since 1870 accounts in Costa Rica, Guatemala, Honduras, Nicaragua, and Salvador are kept in piasters, or silver pesos, that coin being the monetary unit, whose weight, fineness, etc., and the weight and fineness of its subdivisions are the same as those of the silver peso as shown below:

The weight, fineness, etc., of the coins of Central America are as follows:

GOLD.

Denomination.	Weight.	Fineness.	Pure gold contained.	Value in United States gold coin.
	Grains.	*Thousandths.*	*Grains.*	
Onza or doubloon (*a*)	417.590	875	365.390	$15.736
Half onza (*a*)	208.795	875	182.695	7.868
20-peso piece (*b*)	497.806	900	448.025	19.295
10-peso piece (*b*)	248.903	900	224.012	9.647
5-peso piece (*b*)	124.451	900	112.006	4.823
2-peso piece (*b*)	49.780	900	44.802	1.929
1-peso piece (*b*)	24.890	900	22.401	0.964

a Coined prior to 1870. *b* Coined since 1870.

SILVER.

Denomination.	Weight.	Fineness.	Pure silver contained.	Value compared with silver in United States silver dollar.
	Grains.	*Thousandths.*	*Grains.*	
Peso	385.800	900	347.220	$0.935
Half peso	192.900	900	173.610	.468
Quarter peso	96.450	900	86.805	.234
Dime	38.580	835	32.214	.087
Half dime	19.290	835	16.107	.043

CHILE.

By the law of February 11, 1895, Chile introduced the gold standard, and inasmuch as that law provided that after the 1st of June, 1895, the State should redeem its treasury notes in gold on presentation, the country may now be said to be on the gold basis. The new monetary unit is the ideal gold peso of the weight of 0.599103 grams, 0.916⅔ fine. No provision is made for the mintage of this coin. There are gold and silver coins in the new system.

The gold coins, their weight, fineness, and fine weight, expressed in grams, are as follows:

Denomination.	Weight.	Fineness.	Fine weight.
	Grams.	*Thousandths.*	*Grams.*
Condor	11.98207	916⅔	10.98356
Doubloon	5.99103	916⅔	5.49178
Escudo	2.99551	916⅔	2.74589
Peso	.599103	916⅔	.549178

The tolerance of fineness over and under of the gold coins is two one-thousandths. Their tolerance of weight is one one-thousandth for the condor and two one-thousandths for the doubloon and escudo. The condor is worth 20 pesos, the doubloon 10, and the escudo 5. The Government bears the expense of the gold coinage. The English and Australian pound sterling have legal circulation in Chile at the rate of

13⅓ pesos. Gold is full legal tender. The silver coins are the peso, the 20, 10, and 5 centavo pieces. Their weight, fineness, and fine weight are as follows:

Denomination.	Weight.	Fineness.	Fine weight.
	Grams.	*Thousandths.*	*Grams.*
Peso	20	835	16.70
20 centavo	4	835	3.34
10 centavo	2	835	1.67
5 centavo	1	835	.835

The tolerance of fineness of the silver coins, over and under, is four-thousandths. The tolerance of weight is three-thousandths for the peso, five-thousandths for the 20-centavo piece, seven-thousandths for the 10-centavo piece, and ten-thousandths for the 5-centavo piece. Silver is legal tender to the amount of 50 pesos between individuals, but full legal tender to the Government. The mint is required to exchange gold for silver pesos tendered to it for that purpose.

The weight, fineness, and fine weight, expressed in grains, of the new gold and silver coins of Chile are as follows:

GOLD.

Denomination.	Weight.	Fineness.	Fine gold contained.	Value in United States gold coin.
	Grains.	*Thousandths.*	*Grains.*	
Condor	184.9073	916⅔	169.4987	$7.299
Dubloon	92.4536	916⅔	84.7493	3.649
Escudo	46.2268	916⅔	42.3746	1.824
Peso*a*	9.24536	916⅔	8.47493	.3649

a Not coined.

SILVER.

Denomination.	Weight.	Fineness.	Fine silver contained.	Value compared with silver in United States silver dollars.
	Grains.	*Thousandths.*	*Grains.*	
Peso	308.640	835	257.7144	$0.694
20 centavo	61.728	835	51.5428	.139
10 centavo	30.864	835	25.7714	.069
5 centavo	15.432	835	12.8857	.034

CHINA.

SHANGHAI, HANKOW, TIENTSIN, CHEEFOO, ETC.

The Chinese money of account is as follows: 10 cash or li, 1 candareen; 10 candareens or fun or fen, 1 mace; 10 mace or tsien, 1 tael or liang.

The lowest link of the chain alone, the cash or li, * is represented by an actual coin, whereas the candareen, the mace, and the tael are simply donominations denoting certain fixed weights of silver.

The Canton tael weight is 579.84 grains troy (37.573 grams), but is generally taken as equal to 580 grains troy,† which would make 24 taels equal to 29 ounces troy. The multiplier for converting taels into ounces troy is, therefore, 1.208 or 1.208⅓.

* Called also zin, and, by the Dutch, pitjes.

† When the Chinese Government in 1844 fixed the rates at which foreign coins should be received in payment of customs duties, the weight of 20 new rupees in Canton taels was found to be 6.203. As 20 new rupees of 180 grains troy weigh 20 × 180 = 3,600 grains troy, this makes the weight of the Canton tael 580.036434 grains troy. It may, then, fairly be taken at 580 grains in round numbers.

respectively. The mace weight is, accordingly, equal to 58 grains troy, the candareen weight to 5.8 grains troy, and the cash weight (in silver) to 0.58 grains troy.

But the cash or li is not a silver coin; it is made from an alloy of copper, iron, and tin. It is a circular bit of metal, seven-eighths of an inch in diameter, with a square hole in the middle, round which are impressed, on the obverse, Chinese characters, stating the reign, etc.; on the reverse, Mantchu characters, stating the name of the mint. These cash are cast in molds. Originally they represented one-thousandth part of a tael, and nominally they continue to do so to the present day; but they have long since ceased to keep up a corresponding actual metallic value.

Many years ago they had already fallen from the nominal 1,000 per tael to 1,400. Since then their mintage depreciation has been making rapid progress. Some time ago it required from 1,600 to 1,800 of these coins to make up the value of a tael.

The monetary unit—the tael—is in Shanghai a quantity of silver of the fineness of the Mexican dollar (about .898), and weighing a tael, which would make 1 money tael equal $1.3937, and $100 equal 71.7517 money taels.

At Shanghai foreign accounts are kept and the quotations are given in taels. Generally, when converting taels into dollars, $100 are taken to equal 717 taels, or 1 tael equals $1.395.

Besides the Canton tael weight (37.573 grams), there is the Hai-Kwan tael, or Government tael, which weighs 590.35 grains (38.246 grams), or 2 per cent, more than the Canton tael (100 Canton taels equal 98 Hai-Kwan taels).

At Shanghai there is another tael weight, about 2½ per cent lighter than the Canton weight, 36.56 grams (564.20 grains troy). It is used as weight for gold.

There are several local taels at the various ports in China differing greatly in value as compared with the Hai-Kwan or Government tael. The following are the approximate values at the treaty ports:

Ports.	Local taels.	Hai-Kwan taels.	Ports.	Local taels.	Hai-Kwan taels.
Amoy	101.75	100	Ningpo	105.83	100
Chefoo	106.40	100	Pakhoi	110.57	100
Chinkiang	104.16	100	Shanghai	111.40	100
Foochow	110.00	100	Swatow	110.15	100
Hankow	108.75	100	Takow	101.11	100
Hoihow	113.76	100	Tamsui	111.32	100
Ichang	109.65	100	Tientsin	105.00	100
Kiukiang	104.37	100	Wenchow	103.00	100
Newchwang	108.50	100	Wŭhŭ	104.16	100

One hundred Hankow taels are equal to 102.437 Shanghai taels.

From the above it will be seen that one uniform currency or coinage for the whole of China is a great desideratum.

In large native transactions ingots of silver form the medium of exchange. These ingots are called shoes, from some fancied resemblance in shape. They range in weight from a half-tael to 100 taels.

The Shanghai currency consists of such shoes of silver of about 50 taels weight each. These ingots are rendered current by the hong koo, who assays the metal, and affixes to each ingot assayed by him a stamp recording its touch or degree of purity. The hong koo is not an official appointed by the Chinese Government, but derives his authority entirely through an arrangement among the native bankers. According to the stamp affixed by him on each shoe the compradores add from nought up to 3 taels Shanghai weight per 50 taels of actual weight. This addition thus ranges from nought for silver of the hong koo's standard up to 6 per cent for pure silver of 100 toques or touch.* A further addition of 2 per cent is made in conformity with an old custom of long standing. From these data it is easy to deduce the touch or purity of Shanghai sycee, or, more properly speaking, of sycee silver calculated in the actual weight represented by it in Shanghai taels of account:

100 taels pure silver + 6 per cent	106
2 per cent added	2.12
Representing Shanghai tael of account	108.12

108 : 100 Shanghai tael :: 1,000 : 925 (nearly).

The so-called Hai-Kwan (i. e., customs) sycee† which is produced at the customs bank by melting and refining in the Mexican, Spanish, and other foreign dollars

*The Chinese report the fineness of the precious metals by dividing the weight into 100 parts, called toques or touch—98 touch means, accordingly, that the gold or silver ingot, etc., contains 98 parts of pure metal to 2 parts of alloy.

†By the Chinese this silver is called wăn-yin (fine silver), but in foreign commerce it is known as sycee, which is the colloquial pronunciation of the Chinese words se-sze, meaning "fine silk," and implying accordingly that the silver is so pure that it might be drawn out to the finest silken thread wire. Sycee silver means simply, therefore, the "purest silver."

received in payment of duties, commands a premium over the dollar currency ranging from 3 to 10 per cent, according to the supply and demand of the two commodities.

COURSE OF EXCHANGE.

Shanghai receives from London, sight and four months' sight, 3s. 10d. for 1 tael; Paris, sight and four months' sight, 4.90 francs for 1 tael; Germany, four months' sight, 3.95 marks for 1 tael; and Bombay and Calcutta demand 315 rupees for 100 taels. And gives New York, four months' sight, 105 taels for $100; Hongkong, telegraphic transfers and three days' sight, 27 per cent discount, i. e., 73 taels for $100; Yokohama, telegraphic transfers and thirty days' sight, 74 taels for $100.

Gold bars are quoted in taels currency per 10 taels Shanghai weight, 98 touch fine (365.6 grams).

Silver bars 17 B are quoted in taels currency per 100 taels Canton weight.

Mexican and Carolus dollars are quoted in taels per $100.*

HONGKONG, CANTON, FOOCHOW, AND AMOY.

At the above ports accounts are kept in dollars and cents.

At Hongkong, Canton, and Foochow, chopped dollars, which are simply Mexican dollars chopped or stamped by the natives, are the circulating medium, and in all payments it is the custom for them to be examined and weighed at the rate of 717 taels, Canton weight, per $1,000.

At Foochow chopped dollars of the lowest description pass current, but at Hongkong and Canton only fairly good chopped dollars are taken at par.

At Amoy accounts are kept in currency dollars weighed at 720 taels. Canton weight, per $1,000.

Mexican dollars are also taken at Amoy by arrangement, not weighed, but counted.

At these four ports clean or unchopped Mexican dollars usually command a small premium in the market, and when sold at a premium are counted instead of weighed.

The following are the approximate average weights of the various descriptions of dollars circulating at the Chinese ports:

	Grains troy.
Japanese trade dollar	420
Japanese yen or dollar	416
Hongkong dollar	416
Mexican dollar, about	416½
Carolus or Spanish dollar, about	414

The Mexican dollar is about .898 fine, or 6½ pennyweights worse than standard silver. New Mexican dollars weigh from 867 to 869 ounces troy per $1,000, according to where they have been minted, as some of the mints issue coins of fuller weight than others. The value in sterling of the above dollars depends upon the price of bar silver in London, and has ranged in past years from 3s. 6d. to 4s. 6d. The Carolus dollar is about .894 fine, or 7 pennyweights worse than standard.

Sycee and bar silver is dealt in at these ports at a variable premium, the par being taken at 717 taels, Canton weight, equal to $1,000.

CUBA.

The legal monetary system of Cuba is the same as that of Spain. As a matter of fact, however, accounts are kept in the colony in piasters of 8 reals of 16 cuartos each.

The metallic circulation is composed chiefly of the gold coins mentioned below, and of the piasters of Spain and its subdivisions, of Mexican pesos and American dollars.

Domestic transactions are carried on mainly in paper piasters with forced currency. The weight, fineness, etc., of these silver coins will be found under the heads, Spain, Mexico, and United States.

* The preference of the Chinese for the Carolus (Spanish) dollar procures to that coin generally a higher quotation than that for the Mexican dollar. The relation between these coins is as follows: Full weight Carolus dollar, 413.76 grains troy, 7 W.; full weight Mexican dollar, 416.64 grains troy, 8½ W., which, at 60 pence per ounce, standard, makes the Mexican dollar equal 4s. 2.55d., and Carolus dollar equal 4s. 2.09d.

The weight, fineness, etc., of the principal gold coins in circulation are shown in the following table:

GOLD.

Denomination.	Weight.	Fineness.	Pure gold contained.	Value in United States gold coin.
	Grains.	*Thousandths.*	*Grains.*	
Spanish quadruple (onza)	417.590	875	365.390	$15.736
Doubloon (Isabella)	129.538	900	116.584	5.017
Alphonse (25 pesetas)	124.451	900	112.006	4.823

COLOMBIA.

The Republic of Colombia is generally classed among the countries that have the single silver standard, although its currency consists almost exclusively of paper money, divisional silver coin, and nickel coins.

The weight, fineness, etc., of the coins that formerly circulated, and of those that still circulate in Colombia, are shown in the following table:

GOLD.

Denomination.	Weight.	Fineness.	Pure gold contained.	Value in United States gold coin.
	Grains.	*Thousandths.*	*Grains.*	
Double condor	497.806	900	448.025	$19.295
Condor	248.903	900	224.012	9.647

SILVER.

Denomination.	Weight.	Fineness.	Pure silver contained.	Value compared with silver in United States silver dollar.
	Grains.	*Thousandths.*	*Grains.*	
Peso	385.800	900	347.220	$0.935
2 decimo	77.160	835	64.428	.174
Decimo	38.580	835	32.214	.087
One-half decimo	19.290	835	16.107	.043

DENMARK. (See Scandinavian Union.)

ECUADOR.

Ecuador has at present the single silver standard. Up to 1884 the currency of Ecuador consisted of the coins of the neighboring countries. Since 1884 a national currency has been introduced, with the sucre, or peso, 0.900 fine, as the monetary unit. There is, however, a paper currency, at present depreciated over 50 per cent.

The weight, fineness, etc., of the national silver coins of Ecuador are shown in the following table:

SILVER.

Denomination.	Weight.	Fineness.	Pure silver contained.	Value compared with silver in United States silver dollar.
	Grains.	*Thousandths.*	*Grains.*	
Sucre	385.800	900	347.220	$0.935
One-half sucre	192.900	900	173.610	.468
2 dimes	77.160	900	69.444	.187
Dime	38.580	900	34.722	.094
One-half dime	19.290	900	17.361	.047

EGYPT.

The monetary law of November 14, 1885, provided for the introduction of the single gold standard in Egypt, with silver as divisional coin. The Egyptian pound is divided into 100 piasters, and the piaster into 19 ochr-el-guerche or tenths of a piaster. The tolerance of fineness is one one-thousandths and of weight two one-thousandths. The mint coins gold on individual account, and other pieces on account of the Government only. Egyptian pounds and half pounds, which by the ordinary wear and tear of circulation have come to weigh less than 8.44 and 4.22 grams, respectively, cease to have legal currency, but are received by the treasury at their nominal value, after which they are not reissued. Silver is legal tender to the amount of 200 piasters, or about $10 in any one payment. Nickel and bronze coins are legal tender to the amount of 10 piasters, or about 50 cents. Payments in Egypt are generally made in foreign gold pieces, officially rated by the Government as follows:

	Piasters.
Pound sterling	97.50
Turkish pound	87.75
Old Russian imperial	79.45
20-franc piece	77.15
Austrian sequin	45.92

The rate given the sequin and the imperial are nominal, as these pieces do not circulate.

The German gold coins are not rated, but are valued as follows: Twenty-mark pieces, 95.5 piasters; 10-mark pieces, 47.75 piasters.

Silver coins, such as the Maria Theresa thalers, the medjidies, 5-franc pieces, etc., are no longer received in the public treasuries, which accept no coins, except English sovereigns, 20-franc pieces, and Turkish pounds.

The gold and silver coins of Egypt are as follows:

GOLD.

Denomination.	Weight.	Fineness.	Pure gold contained.	Value in United States gold coin.
	Grains.	*Thousandths.*	*Grains.*	
Egyptian pound	131.172	875	114.775	$4.943
50 piasters	65.586	875	57.387	2.471
20 piasters	26.234	875	22.955	.988
10 piasters	13.117	875	11.477	.494
5 piasters	6.558	875	5.738	.247

SILVER.

Denomination.	Weight.	Fineness.	Pure silver contained.	Value, compared with silver in United States silver dollar.
	Grains.	*Thousandths.*	*Grains.*	
20 piasters	432.096	833⅓	360.080	$0.970
10 piasters	216.048	833⅓	180.040	.485
5 piasters	108.024	833⅓	90.020	.242
2 piasters	43.209	833⅓	36.008	.097
Piaster	21.604	833⅓	18.004	.049
One-half piaster	10.802	833⅓	9.002	.024
One-quarter piaster	5.401	833⅓	4.501	.012

FRANCE (See Latin Union).

FINLAND.

Finland has the single gold standard.

Previous to 1886, Finland had the same monetary system as Russia, but the credit bills of the latter country did not circulate in Finland.

By a law of August 9, 1877, the present monetary system of the country was established, with the markkaa (equal to the franc) as monetary unit.

The weight, fineness, etc., of the gold and silver coins are shown in the following table:

GOLD.

Denomination.	Weight.	Fineness.	Pure gold contained.	Value in United States gold coin.
	Grains.	*Thousandths.*	*Grains.*	
20 markkaa	99.561	900	89.605	$3.859
10 markkaa	49.780	900	44.802	1.929

SILVER.

Denomination.	Weight.	Fineness.	Pure silver contained.	Value, compared with silver in United States silver dollar.
	Grains.	*Thousandths.*	*Grains.*	
2 markkaa	159.952	863	138.836	$0.374
1 markkaa	79.976	868	69.418	.187
50 penni	39.336	750	29.500	.079
25 penni	19.668	750	14.750	.039

GERMAN EMPIRE.

MONETARY SYSTEM.

The fundamental laws of the present monetary system of Germany are those of December 4, 1871, and July 9, 1873. The standard is gold monometallic, and the monetary unit the mark of 100 pfennigs. Two thousand seven hundred and ninety marks are manufactured from 1 kilogram of fine gold.

The gold coins are:

Denominations.	Legal weight.	Fineness.	Fine weight.
	Grams.	*Thousandths.*	*Grams.*
20 marks	7.96495	900	7.168458
10 marks	3.98247	900	3.584229
5 marks	1.99123	900	1.792114

Hence, the mark, or monetary unit, contains 0.358422939 grams of pure gold.

The maximum coinage charge for individuals is 14 marks, in the case of 20-mark pieces, per kilogram of fine gold.

The law of the 4th of December, 1871, was concerned exclusively with the creation of the gold coins of the Empire, and provided for the retirement of the old gold coins. It dealt with silver only to authorize the retirement of the current coins of that metal. The law of July 9, 1873, was supplemental to it and organized the new monetary system.

As to gold, it made no change in the law of 1871, save to authorize the coinage of the 5-mark gold piece and to allow the coinage of 20-mark gold pieces on private account when the mints were not occupied on account of the State.

The silver coins of the new system, 0.900 fine, are 5 mark, 2 mark, 1 mark, 50 and 20 pfennig pieces, 5 grams of fine silver to a mark. The coinage of silver is solely on account of the State. The total coinage of silver was limited to 10 marks per

capita of the population of the Empire. Silver is legal tender to the amount of 20 marks. All these coins are exchangeable for gold at the public treasuries.

In effecting its monetary reform Germany called in all its old silver coins, with the exception of its thalers, which are still in circulation to the amount of about 450,000,000 marks, the thaler being reckoned as equivalent to 3 marks of the new system.

The weight, etc., of the coins of the German Empire, expressed in grains, are as follows:

GOLD.

Denomination.	Weight.	Fineness.	Pure gold contained.	Value in United States gold coin.
	Grains.	*Thousandths.*	*Grains.*	
Double crown (20 marks)	122.915	900	110.623	$4.764
Crown (10 marks)	61.457	900	53.311	2.382
Half-crown (5 marks)	30.728	900	27.656	1.191

SILVER.

Denomination.	Weight.	Fineness.	Pure silver contained.	Value compared with silver in United States silver dollars.
	Grains.	*Thousandths.*	*Grains.*	
5 marks	428.066	900	385.300	$1.039
2 marks	171.466	900	154.319	.416
Mark	85.733	900	77.160	.208
50 pfennigs	42.867	900	38.580	.104
20 pfennigs	17.146	900	15.432	.042

GREAT BRITAIN AND THE COLONIES.

MONETARY SYSTEM.

Prior to 1798 the double standard prevailed in England with the legal ratio of gold to silver of 1 to 15.21. With the ratio in France 1 to 15.5, commencing with 1785, gold began and continued to leave England and silver to take its place, and to prevent the silver coin from taking the place of gold, the English Parliament, in 1798, passed an act prohibiting the coinage of silver. When this measure was enacted the intention was apparently that it should be provisional only, but it soon became positive, and England to all intents and purposes has had the single gold standard since 1798. The single gold standard was definitely adopted by virtue of the act of Parliament passed June 22, 1816.

The sovereign, or pound sterling, the monetary unit, is a gold coin weighing 7.988 grams fineness 0.916⅔ containing 7.322 grams or 113 grains of pure gold. The legal gold coins of Great Britain are the sovereign, half-sovereign, 2-sovereign and 5-sovereign pieces. The gold coins in circulation consist of sovereigns and half sovereigns.

The silver coins of Great Britain are the crown, double-florin, half-crown, florin, shilling, 6-pence, and 3-pence pieces. The silver coins of Great Britain are a legal tender for 40s. or £2, equal to $9.73,2 in United States money. The present legal ratio between gold and silver in the coinage of Great Britain is as 1 to 14.28781. While individuals have the right to deposit gold at the royal mint for coinage, and receive in return therefor £3 17s. 10½d. per ounce of Standard gold (916⅔ in English standard) under the law, but as a matter of fact since 1844 the Bank of England is the only depositor of gold at the royal mint. The present charter of the bank obtained in 1844 made it obligatory upon the bank to receive all gold brought to it by the public and to pay for the same immediately at the rate of £3 17s. 9d. per ounce standard. The difference of 1½d. compensates the bank for the loss of interest between the date of the deposit of the gold at the mint and the date it received the same back in the form of coin. The royal mint is open to receipt of deposits of gold only two days of each week, therefore depositors prefer to sell their bullion directly to the bank in preference to depositing the same themselves, as their losses in interest and other expenses would exceed 1½d. the amount deducted by the bank. Silver is coined only on account of the Government.

The English colonies of Malta, the Cape of Good Hope, Natal, the Australian colonies, and New Zealand have the same monetary systems as in England.

In Canada, however, the gold dollar of the United States is the monetary unit and the pound sterling or sovereign is a legal tender at the rate of $4.866.

In the settlements of the Straits of Malacca and Hongkong the single silver standard prevails, the Mexican dollar being the monetary unit and a legal tender for all sums.

The weight, fineness, etc., of the coins of Great Britain are shown in the following table:

GOLD.

Denomination.	Weight.	Fineness.	Pure gold contained.	Value in United States gold coin.
	Grains.	*Thousandths.*	*Grains.*	*Dollars.*
Five pounds	616.37239	916⅔	565.008024	24.332817
Two pounds	246.54895	916⅔	226.003204	9.733126
Sovereign	123.27447	916⅔	113.001597	4.866563
Half sovereign	61.63723	916⅔	56.500794	2.433281

SILVER.

Crown	436.36363	925	403.636357	1.087235
Half crown	218.18181	925	201.818174	.543617
Florin	174.54545	925	161.454541	.434894
Shilling	87.27272	925	80.727266	.217447
Sixpence	43.63636	925	40.363633	.108723
Fourpence	29.09090	925	26.909082	.072482
Threepence	21.81818	925	20.181816	.054361
Twopence	14.54545	925	13.454541	.036241
Penny	7.27272	925	6.727266	.018120

GREECE. (See Latin Union.)

HAITI.

The money of account of Haiti is the gourde of 100 cents. Some years ago the monetary system of the island was very complicated in consequence of the tariffication of a large number of foreign coins, made necessary by the absence of national coins and the enormous issue of paper money.

A law of September 24, 1880, provided for the minting of a national coin, called the gourde, weighing 1.6129 grams in gold of the fineness of 0.900, and 25 grams in silver of the same fineness. The divisional silver coins are 0.835 fine.

The actual currency of Haiti is an irredeemable paper. The metallic gourdes have disappeared entirely from circulation and are hoarded. Only the divisional coins are found in circulation, but even these frequently command a premium of from 1 to 2 per cent.

A great many United States gold pieces are to be met with, owing to the fact that export duties have to be paid in gold.

The weight, fineness, etc., of the gold and silver pieces of Haiti, provided for by law, are as follows:

GOLD.

Denomination.	Weight.	Fineness.	Pure gold contained.	Value in United States gold coin.
	Grains.	*Thousandths.*	*Grains.*	
10 gourdes	248.903	900	224.012	$9.647
5 gourdes	124.451	900	112.006	4.823
2 gourdes	49.780	900	44.802	1.929
Gourde	24.890	900	22.401	.964

SILVER.

Denomination.	Weight.	Fineness.	Pure silver contained.	Value compared with silver in United States silver dollar.
	Grains.	*Thousandths.*	*Grains.*	
Gourde	385.800	900	347.220	$0.935
One-half gourde	192.900	835	161.072	.434
One-fifth gourde	77.160	835	64.428	.174
One-tenth gourde	38.580	835	32.214	.087

HAWAII.

Hawaii has no gold coins of its own. Accounts are kept in United States dollars, divided into 100 cents. Foreign gold coins circulate in the country and are received by the treasury at the following rates:

American eagles	$10
English sovereigns	5
20-franc pieces	4
Russian imperials	4

Hawaii has also a paper currency redeemable at par in gold or silver dollars.

The two latest monetary laws of Hawaii officially communicated to the Bureau of the Mint are as follows:

I.—AN ACT to regulate the currency.

Be it enacted by the King and legislative assembly of the Hawaiian Islands in the Legislature of the Kingdom assembled:

SECTION 1. From and after the 1st day of December, in the year of our Lord 1884, the gold coins of the United States of America shall be the standard and legal tender at their nominal value in the payment of all debts, public and private, within the Hawaiian Kingdom.

SEC. 2. The standard silver coins of the United States of America and the silver coins of the Hawaiian Kingdom shall be, from and after December 1, 1884, a legal tender at their nominal value for any amount not exceeding $10 in any one payment.

SEC. 3. From and after the 1st day of December, 1884, gold and silver coins other than the coins of the United States and of the Hawaiian Kingdom shall be received in the treasury, at a rate not exceeding their bullion value, for Government dues, duties, and taxes.

SEC. 4. Whenever it shall appear that there is such an excess of silver coins in circulation as disturbs the equilibrium between gold and silver coins under the provisions of this act, the minister of finance, in order to restore such equilibrium, shall replace sufficient silver coin, from any silver coin which may be in the treasury either as Government realization or on deposit on account of any silver certificates, with gold coins of the United States, in the same manner as hereinafter provided in sections 5, 6, and 7 of this act.

SEC. 5. Upon the approval of this act the minister of finance, without delay, shall give notice by public advertisement that for sixty days immediately following such notice silver coins of all denominations, excepting silver coins of the Hawaiian Islands and of the United States, will be received at the treasury at their nominal value in exchange for Hawaiian coins at their nominal value; and the minister of finance, without delay, shall arrange, through advertisement, for tenders for the sale of all silver coins which are or may be in the treasury, excepting Hawaiian silver coins, in lots of not more than $50,000 each, and the delivery of the proceeds of the sales of said silver coins into the treasury in gold coins of the United States.

SEC. 6. The minister of finance shall require of those persons whose tenders being accepted, shall desire to remove the silver coin bid for by them from the treasury prior to the delivery of the gold therefor, a deposit in the treasury of the Hawaiian Government bonds of like amount as the nominal value of the silver delivered to them and the said bonds shall be held as security for the delivery of the proceeds of the sale of the silver coins to the treasury in gold coins of the United States within thirty days, and upon such delivery the bonds so deposited shall be returned.

SEC. 7. The expense, cost, and loss incident to the conversion of silver coins into the gold coins of the United States shall be borne by the treasury, and the minister of finance is hereby authorized and required to provide for the same from any moneys not otherwise appropriated, or which may hereafter be appropriated, and he shall render an accurate statement of such expenditure in his report to the legislative assembly.

SEC. 8. On and after the 1st day of December, 1884, all outstanding silver certificates, excepting the $10 silver certificate, on presentation at the treasury and

on demand shall be redeemed at their nominal value in United States gold coin, and all silver certificates so redeemed shall be canceled by the registrar of public accounts.

SEC. 9. The minister of finance may, at his discretion, receive United States gold coin on deposit to any amount not less than $50, and shall issue therefor certificates of deposit of such denominations as he shall deem to be for the public interest, payable to bearer on demand without interest. The said certificates shall be signed by the minister of finance and countersigned by the registrar of public accounts, and the money received for such certificates shall be held as a special deposit, to be used only for the cancellation of the same, and section 479 of the civil code as amended by chapter 41 of the laws of 1874 is hereby repealed.

SEC. 10. Chapter 37 of session laws of 1880, being an act to provide for a national coinage, is hereby repealed; and chapter 41 of session laws of 1876, being an act to regulate the currency, is hereby repealed; this repeal to take effect on the 1st day of December, 1884.

SEC. 11. This act shall take effect from and after the date of its approval.

Approved this 17th day of July, A. D. 1884.

KALAKAUA, *Rex.*

II.—AN ACT to regulate the currency of the Hawaiian Kingdom.

Be it enacted by the King and the legislative assembly of the Hawaiian Islands in the Legislature of the Kingdom assembled:

SECTION 1. The gold coins of the United States of America are the standard, and legal tender at their nominal value in the payment of all debts, public and private, within the Hawaiian Kingdom.

SEC. 2. The silver coins of the Hawaiian Kingdom are legal tender at their nominal value for any amount not exceeding $10 in any one payment.

SEC. 3. All outstanding silver certificates and all certificates to be issued under this act—except the $10 certificates—whether they contain the words "silver coin" or not, shall be redeemed at their nominal value on demand in United States gold coin, and all certificates so redeemed shall be forthwith withdrawn and canceled by the registrar of public accounts.

And it shall be lawful for the minister of finance to issue or cause to be issued from the treasury, from time to time, certificates of deposit of the denomination of $10, $20, $50, and $100, respectively, upon transferring from the general fund and setting apart as a special deposit an equal amount of lawful coin of the Kingdom as security for the redemption of such certificates, the whole amount of such outstanding and new issue of certificates as aforesaid not to exceed in the aggregate at any one time the sum of $325,000, of which not exceeding $30,000 shall be in certificates of the denomination of $10.

SEC. 4. The certificates provided for in section 3 of this act shall be signed by the minister of finance and countersigned by the registrar of public accounts, and the special deposit of coin in the treasury for their redemption shall be used only for the payment and redemption of such certificates, and shall be kept as a special deposit for such purpose and no other.

SEC. 5. Chapter XVIII of the session laws of 1884 and all other laws conflicting with the provisions of this act are hereby repealed.

SEC. 6. This act shall take effect from and after its approval.

Approved this 15th day of October, A. D. 1886. KALAKAUA, *Rex.*

In 1883 and 1884 there were coined at the mint at San Francisco $1,000,000 in silver for the Hawaiian Government from dies specially prepared for that purpose. The denominations and amount of these coins were as follows:

Dollars	$500,000
Half dollars	350,000
Quarter dollars	125,000
Dimes	25,000

These coins were of the same weight and fineness as the coins of the United States and of the same denomination, as shown by the following table:

Denomination.	Weight.	Fineness.	Pure silver contained.	Value compared with silver in United States silver dollar.
	Grains.	*Thousandths.*	*Grains.*	
Dollar pieces	412.50	900	371.250	$1.00
50-cent pieces	192.90	900	173.610	.467
25-cent pieces	96.45	900	86.805	.233
10-cent pieces	38.58	900	34.722	.093

JAPAN.

Since 1871 the legal money has been the yen of 100 sen. The basis of the new monetary system was to be the Mexican dollar, whose equivalent, the new silver yen, weighed 416 grains Troy (26.9563 grams), 0.900 fine. But as at the same time gold yens were coined of 900 fineness, and containing 1½ grams fine gold, the double standard was established in Japan with a proportion of gold to silver as 1 to 16.173818. As this relation gave to gold a higher value than its market value for the time being, the Government found it more advantageous to coin gold, and in 1872 ceased altogether to coin silver. The gold yens are pieces of 20, 10, 5, 2, and 1 yen, the piece of 20 yens weighing 33⅓ grams, or 514.41 grains Troy, 0.900 fine, i. e., 30 grams or 462.97 grains Troy, fine. Since 1872 gold has considerably risen in its value toward silver. In consequence, gold yens have been largely exported to Europe, and the actual standard of Japan is now silver.

In 1875 the Japanese Government resumed the coinage of silver, this time in the shape of a "trade dollar," weighing 420 grains Troy, 0.900 fine, the exact equivalent of the American trade dollar, and tried to introduce this coin as a monetary basis instead of the Mexican dollar, and for that purpose made it in 1878 a legal tender in all public and private transactions, and reduced the mint charge for its coinage to 3 per cent, and the minimum amount of silver received by the mint to 500 ounces, but it did not succeed in driving out the Mexican dollar, which, although weighing only about 416 grains, circulated on a par with the Japanese trade dollar.

In September, 1879, the Japanese silver yen of 416 grains, 0.900 fineness, was declared by the Government to be a legal tender, to be received and paid on a par with the Mexican dollar, and to be accepted at the Government offices in payment of customs dues, land rents, etc. The foreign banks and the mercantile community have recognized this action on the part of the Government, and this silver yen of 416 grains is the present monetary unit, and has virtually supplanted the Mexican dollar.

Trade among the Japanese is carried on to a large extent in a Government paper money which is inconvertible, but used to be on a par with gold. Afterwards it stood at a heavy discount, owing to the Government not having kept an exact record of the issue, and being unable to redeem it in specie. This Government paper was styled kinsatsu. At present paper yens are in circulation, and they stand at par.

How Japan came to be a single silver standard currency is explained in the following abstract from an article by J. H. Gubbins, second secretary of the British legation at Tokio, which appeared in the London Chamber of Commerce Journal of October, 1894:

"Japan's position as a bimetallic country.—Japan now ranks among the silver-using countries, and it may be interesting to note the steps by which she arrived at this position.

When her mint was established in 1871, the Japanese Government adopted a gold standard. The gold yen, a coin of 25.72 grains weight and 0.900 fineness, was made the unit and was legal tender to any amount. At the same time, in order to meet the situation then created by the circulation at the treaty ports of the Mexican dollar, various issues of which were current, including the depreciated kind known as chop dollars, a silver yen was also coined; the weight of this was 416 grains and its fineness 0.900. In 1875 a fresh departure was taken by the coinage of a new silver yen, called the trade dollar, of 420 grains weight, and of the same fineness as the two coins already mentioned. This coin was supplied at the mint, on application, to both foreigners and Japanese. Both these silver yen were issued simply for the purpose of circulation in the treaty ports in opposition to the Mexican dollar, and their use was limited strictly to the payment of customs duties and other taxes, and to operations between Japanese and foreign merchants; their relative value as compared with the standard gold yen was fixed at the rate of 100 silver yen to 101 gold yen. This condition of things lasted till 1878, by which time the unsoundness of the policy adopted in issuing the trade dollar was recognized by the Government. Its coinage was therefore stopped, and in the same year a notification was published declaring the silver yen originally coined to be legal tender to any amount. From this time Japan's bimetallic system practically dates, but it was not until 1883, when the interest on an internal loan, originally payable in silver or gold, was made payable in silver only, that Japan's position as a silver-using country was finally established."

The weight, fineness, etc., of the coins of Japan are shown in the following table:

GOLD.

Denomination.	Weight.	Fineness.	Pure gold contained.	Value in United States gold coin.
	Grains.	*Thousandths.*	*Grains.*	
20 yens	514.400	900	462.960	$19.938
10 yens	257.200	900	231.480	9.969
5 yens	128.600	900	115.740	4.984
2 yens	51.440	900	46.296	1.993
1 yen	25.720	900	23.148	.997

SILVER.

Denomination.	Weight.	Fineness.	Pure silver contained.	Value compared with silver in United States silver dollar.
	Grains.	*Thousandths.*	*Grains.*	
1 yen	416.000	900	374.400	$1.008
50 sen	208.000	800	166.400	.448
20 sen	83.200	800	66.560	.179
10 sen	41.600	800	33.280	.089
5 sen	20.800	800	16.640	.044

THE LATIN UNION—FRANCE, BELGIUM, ITALY, SWITZERLAND, AND GREECE.

Previous to the formation of the Latin Union there had existed a de facto monetary union between France, Belgium, Italy, and Switzerland, the three latter countries having adopted the system established by the French law of the 17th of Germinal, year XI (April 6, 1803), the basis and monetary unit of which was the silver franc, and which granted legal currency to gold at the ratio in coinage of gold to silver of 1 to 15½.

The change, however, in the commercial ratio of the value of the precious metals, consequent on the enormous production of gold in California and Australia, caused an ever-increasing substitution of gold for silver in the monetary systems of these countries. In the years 1850–1865 silver began to be exported from them, and a great dearth of silver coins to be felt. To remedy these evils, by providing a uniform metallic currency system for these countries, was the chief incentive that led to the monetary convention of December 22, 1865, and to the formation of the Latin Union. The contracting States maintained the double standard and the existing ratio of value of 1 to 15½, but limited the standard silver coins to be stamped to the 5-franc silver piece. During the deliberations of the conference the delegates of Belgium, Italy, and Switzerland advocated the abolition of that coin and the introduction of the single-gold standard, but their endeavors were frustrated by the influence of the French Government.

All silver coins of less value than the 5-franc piece, i. e., the 2, 1, half, and one-fifth franc pieces, were transformed into divisional coins.

Thus, the system of the union, under the convention of 1865, became identical with that established for France by the law of April 6, 1803, and its subsequent amendments by the French Parliament. The law of April 6, 1803, provided that 5 grams of silver, 0.900 fine, should constitute the monetary unit and be called the franc. But the basis of the monetary system of that year exists in the system of Latin Union only in the 5-franc silver piece, the 1-franc piece having been reduced to a fineness of 0.835.

By the convention of 1865 each of the contracting states obligated itself to receive into its treasuries the coins manufactured by the others, without limitation as to the value, in the case of gold coins and 5-franc silver pieces, and to the amount of 100 francs in the case of other silver pieces in any one payment. It was further stipulated that the latter should be legal tender in the country that issued them, to the amount of 50 francs, between private parties in any one payment, and that they should be taken back by such country and exchanged for gold or 5-franc silver pieces, this obligation to be prolonged during the two years beginning with the expi-

ration of the convention. The nominal value of the divisional silver coins, under this convention, being greater than their intrinsic value, because of the lowering of their fineness, their coinage was reserved to the states respectively and limited to 6 francs per capita of the population of each. This first convention of the Latin Union, to which Greece became a party in 1867, was concluded for a period of fifteen years, with a provision for tacit renewal. It maintained the fineness of 0.900 for the 5-franc silver piece and provided for the free coinage of both metals, thus putting the Latin Union under the bimetallic system. The depreciation of silver, which began in 1872, forced the contracting powers first to limit and then to suspend the coinage of the 5-franc silver piece.

These measures were taken in fulfillment of special conventions dated January 31, 1874, April 26, 1875, February 3, 1876, and November 5, 1878, and were sanctioned by the conventions of November 5, 1878, and November 6, 1885.

The convention of the 23rd of December, 1865, expired on the 1st of January, 1880. A new convention of the 5th of November, 1878, prolonged the duration of the Latin Union for five years. The convention now in force is dated November 6, 1885. By its terms the suspension of the coinage of the 5-franc silver piece is maintained in the countries of the union; but any of the contracting states may resume the free coinage of silver on condition of exchanging, during the entire duration of the convention, the 5-franc silver pieces bearing its stamp and circulating in the other states of the union, for gold, on demand. The latter, however, would then be at liberty not to receive the 5-franc silver pieces of the state that resumed the free coinage of the white metal. It was likewise stipulated in the convention of 1885 that the coins of each of the signatory powers should be received by the treasuries of the others as well as by the banks of France and Belgium, and that the union might be terminated any time after January 1, 1891, by giving one year's notice.

During the year following the termination of the convention, the several Governments are to proceed to the exchange and return to the country that issued them, of the 5-franc silver pieces. Any balance remaining after the exchange has to be settled in gold, or bills of exchange, on the debtor state. Belgium, however, is obliged to pay France only one-half the balance and Switzerland only 6,000,000 francs in this way, but has obligated itself not to introduce into its monetary system for five years any change which might hinder the return to it of the other half, by the way of trade, and has guaranteed that this half shall not exceed 200,000,000 francs. In Italy's case, the maximum of the 5-franc pieces it has to take back from Switzerland is fixed at 30,000,000 francs, and the minimum balance from France at the proportion agreed upon between the latter country and Belgium.

In brief, therefore, the Latin Union has the double standard and the ratio of gold to silver of 1 to 15½; 3,100 francs being coined out of the kilogram of standard gold, and 200 francs out of the kilogram of standard silver; 3,444⅘ francs out of the kilogram of pure gold, and 222⅔ francs out of the kilogram of pure silver. The coinage of gold is unlimited and that of silver suspended. The coinage charge is 7½ francs per kilogram fine for gold and 1½ francs per kilogram fine for silver. Gold coins and the 5-franc silver pieces are unlimited legal tender.

The gold coins are—

Denomination.	Legal weight.	Fineness.	Fine weight.
	Grams.	*Thousandths.*	*Grams.*
100 francs	32.258	900	29.032
50 francs	16.129	900	14.516
20 francs	6.452	900	5.806
10 francs	3.226	900	2.903
5 francs	1.613	900	1.452

The franc is known as the lira in Italy and as the drachma in Greece. The only full legal-tender silver coin is the 5-franc piece; legal weight, 25 grams; fineness, 0.900; fine weight, 22.5 grams.

The divisional silver coins are—

Denomination.	Legal weight.	Fineness.	Fine weight.
	Grams.	*Thousandths.*	*Grams.*
2 francs	10.0	835	8.350
1 franc	5.0	835	4.180
50 centimes	2.5	835	2.088
20 centimes	1.0	835	0.835

The centime is called the centesimo (plural centesimi) in Italy, and the lepton (plural lepta) in Greece. These silver coins are legal tender between individuals to the amount of 50 francs, and are receivable by the State to the amount of 100 francs in single payments.

The text of the monetary convention of the States of the Latin Union, signed November 5, 1885, is as follows:

TEXT OF THE MONETARY CONVENTION CONCLUDED AT PARIS, NOVEMBER 6, 1885, BETWEEN FRANCE, GREECE, ITALY, AND THE SWISS CONFEDERATION, AND OF THE LAW BY WHICH BELGIUM GIVES ITS ADHESION TO THE SAME.

[Translated from the Moniteur Belge, December 31, 1885.]

Monetary convention concluded at Paris, November 6, 1885, between France, Greece, Italy, and the Swiss Confederation.

ARTICLE 1. France, Greece, Italy, and Switzerland remain a union in all that regards the fineness, weight, diameter, and circulation of their gold and silver coins.

ART. 2. The denominations of the gold coins stamped with the impression of the high contracting parties are those of the pieces of 100 francs, 50 francs, of 10 francs, and 5 francs, fixed as to fineness, weight, allowance, and diameter, as follows:

Denominations.	FINENESS.		WEIGHT.		Diameter.
	Legal fineness.	Deviation from fineness, both over and under.	Legal weight.	Deviation from legal weight, over and under.	
	Thousandths.	*Thousandths.*	*Grams.*	*Thousandths.*	*Millimeters.*
100 francs	900	1	32.25806	1	35
50 francs			16.12903		28
20 francs			6.45161	2	21
10 francs			3.22580		19
5 francs			1.61290	3	17

The contracting Governments shall admit without distinction into their public treasuries the pieces of gold manufactured under the preceding conditions in any one of the four States, reserving, however, the right to exclude the pieces the weight of which shall have been reduced by waste one-half per centum below the deviations mentioned above, or the impressions of which shall have been effaced.

The type of the silver 5-franc pieces stamped with the impression of the high contracting parties is fixed as to fineness, weight, deviation, and diameter, as follows:

FINENESS.		WEIGHT.		Diameter.
Legal fineness.	Deviation from legal fineness above and below.	Legal weight.	Deviation from legal weight above and below.	
Thousandths.	*Thousandths.*	*Grams.*	*Thousandths.*	*Millimeters.*
900	2	25	3	37

The contracting Governments shall reciprocally receive into their public treasuries the said 5-franc silver pieces.

Each of the contracting States agrees to take back from the public treasuries of the other States the silver 5-franc pieces whose weight shall have been reduced by waste 1 per cent below the legal allowance, provided they have not been fraudulently debased, and that the impressions thereon have not been effaced.

In France the silver 5-franc pieces shall be received in the coffers of the Bank of France on the accounts of the treasury, as is provided by the papers exchanged between the French Government and the Bank of France, dated respectively the 31st of October and the 2d of November, 1885, and which are made part of the present convention.

This engagement is made for the duration of the convention fixed by section 1 of article 13, and the bank shall not be bound beyond that term by the application of the clause relating to tacit renewal provided for in section 2 of the same article.

In case the provisions concerning the legal currency of the silver pieces of 5 francs stamped by the other States of the union are abrogated, either by Greece or

by Italy or by Switzerland, within the term of the engagement taken by the Bank of France, the power or powers which shall have revoked these provisions engage that their banks of issue shall receive the 5-franc silver pieces of the other States of the union on conditions identical with those on which they receive the 5-franc silver pieces stamped with the national effigy.

Two months before the term assigned for giving notice of the termination of the convention the French Government shall inform the States of the union whether the Bank of France intends to continue or to end the engagement above mentioned. In default of such engagement the Bank of France shall be subject to the provision relative to tacit renewal.

ART. 4. The high contracting parties engage to manufacture silver 2-franc pieces, silver 1-franc pieces, silver 50-centime pieces, and silver 20-centime pieces, only on the following conditions, hereinafter fixed as to fineness, weight, and diameter:

Pieces.	FINENESS.		WEIGHT.		Diameter.
	Legal fineness.	Allowance of fineness above and below.	Legal weight.	Allowance weight above and below.	
	Thousandths.	*Thousandths.*	*Grams.*	*Thousandths.*	*Millimeters.*
2 francs	835	3	10.0	5	27
1 franc			5.0		23
50 centimes			2.5	7	18
20 centimes			1.0	10	16

These pieces shall be remelted by the Governments which shall have issued them, when reduced by waste 5 per cent below the allowances above mentioned, or when the impression on them shall have disappeared.

ART. 5. The silver pieces coined according to the conditions of article 4 shall be legal tender between private parties of the State that shall have issued them to the extent of 50 francs for a single payment.

The State which shall have put them in circulation shall receive them from its own citizens without limit as to quantity.

ART. 6. The public coffers of each of the four States shall accept the silver coins manufactured by one or more of the contracting States conformably to article 4 to the amount of 100 francs for each payment made to such coffers.

ART. 7. Each of the contracting Governments engages to take back from individuals, or from the public treasuries of the other States, the small silver coins which it shall have issued, and to exchange them for an equal value of current coin, gold or silver, manufactured subject to the conditions of articles 2 and 3, provided that the sum presented for exchange shall not be less than 100 francs. This obligation shall be prolonged a year, beginning with the expiration of the present convention.

ART. 8. The coinage of gold pieces manufactured under the conditions of article 2, with the exception of that of the pieces of 5 francs in gold provisionally suspended, is free to each of the contracting States.

The coinage of 5-franc silver pieces is provisionally suspended, and shall not be resumed until unanimous agreement in that regard shall have been reached by all the contracting States.

However, should one of the States desire to resume the free coinage of 5-franc silver pieces it shall have power to do so, on condition of exchanging or refunding during the full term of the present convention, in gold, and at sight, to the other contracting countries, on their demand, the 5-franc silver pieces stamped with their effigies and circulating within their territory. Moreover, the other States shall be free no longer to receive the money of the States which shall resume the stamping of the said pieces.

The State desirous of resuming such coinage shall, preliminary thereto, call a conference of its associates, to regulate the conditions of such resumption. However, the power mentioned in the preceding paragraph shall not be subordinated to the establishment of an agreement, and the conditions of exchange and refundings agreed to in the same paragraph may be modified. In the absence of an understanding, while preserving the benefit of the stipulations which precede as regards the State which shall resume the free coinage of 5-franc silver pieces, Switzerland reserves to herself the power to leave the union before the expiration of the present convention. That power is, however, subject to these two conditions:

(1) That for four years, beginning with the coming into force of the present convention, the fourteenth article and the annexed arrangement shall not be applicable as regards the States which shall not have resumed the free coinage of 5-franc silver pieces.

(2) That the silver coins of the said States shall continue during the same period to circulate in Switzerland, conformably to the stipulations of the present convention. On its part, Switzerland agrees not to resume during the same period of four years the free coinage of 5-franc silver pieces.

The Swiss Government is authorized to cause the remelting of the old issues of 5-franc silver pieces to be proceeded with, but on condition that it shall effect the retirement of the old pieces at its own expense.

ART. 9. The high contracting parties shall not have power to issue 2-franc silver pieces, 1-franc silver pieces, 50-centime silver pieces, and 20-centime silver pieces, stamped in accordance with the conditions mentioned in article 4, except to a value corresponding to 6 francs per inhabitant.

This figure, account being taken of the last census had in each State of the normal increase of population, is fixed—

	Francs.
For France, Algiers and the colonies	256,000,000
For Greece	15,000,000
For Italy	182,000,000
For Switzerland	19,000,000

The sums already issued up to the present day by the contracting States shall be deducted from the above sums. The Italian Government is, by way of exception, authorized to cause to be manufactured a sum of 20,000,000 in silver fractional pieces, this sum being destined to assure the replacing of the old coins by pieces stamped under the conditions of article 4 of the present convention.

The Swiss Federal Government is authorized, by way of exception, regard being had to the wants of the population, to cause to be manufactured a sum of 6,000,000 francs in fractional pieces of silver.

The French Government is equally authorized, by way of exception, to proceed to remelting, up to the amount of 8,000,000 francs, silver divisional pieces of the Pontifical pieces previously withdrawn from circulation.

ART. 10. The date of manufacture shall be inscribed, in strict conformity with the year of coinage, on the gold and silver coins stamped in the four States.

ART. 11. The Government of the French Republic accepts the mission of centralizing all the administrative and statistical documents relating to the issue of coins, to the production and consumption of the precious metals, to the monetary circulation, to the counterfeiting and deterioration of coins. It shall communicate them to the other Governments, and the contracting parties shall take counsel together, if there be occasion therefor, as to the proper measures to give all desirable exactness to that information, as well as to prevent the counterfeiting and deterioration of coins and to insure the repression thereof.

ART. 12. Every request to become a party to the present convention made by a State which shall accept the obligations thereof, and which shall adopt the monetary system of the union, shall be granted only with the unanimous consent of the high contracting parties.

The latter agree to call in or refuse legal currency to the 5-franc silver pieces of those States which do not belong to the union. These pieces shall not be accepted in the public coffers nor in the banks of issue.

ART. 13. The present convention, which shall come into force on the 1st of January, 1886, shall remain in force until January 1, 1891.

If one year before this time it shall not have been declared terminated by the contracting powers, it shall be prolonged from year to year, with full legal force and effect by way of tacit renewal, and shall continue to be obligatory for one year, beginning with the 1st day of January following notice of its termination.

ART. 14. In case of notice of termination of the present convention each of the contracting States shall be bound to take back the 5-franc silver pieces which it shall have issued and which shall be found in circulation, or in the public coffers of the other States, and is charged with the payment to those States of a sum equal to the nominal value of the pieces called in in accordance to the conditions determined in a special arrangement which shall remain annexed to the present convention.

ART. 15. The present convention shall be ratified; the ratifications thereof shall be exchanged at Paris at the earliest moment possible, and not later than the 30th of December, 1885.

In witness whereof the respective plenipotentiaries have signed the present convention, and have set their seals opposite their signatures.

Arrangement relative to the execution of article 14 of the convention of November 6, 1885.

The Governments of France, Greece, Italy, and Switzerland desiring, by a special arrangement, to regulate the execution of the liquidation clause inserted in the monetary convention concluded between them on that day, the undersigned, being duly authorized to such effect, agree to the following provisions:

ARTICLE 1. During the year which shall follow the expiration of the convention the respective exchanges and the return to their own country of the 5-franc silver pieces which may exist in equivalent quantities shall be proceeded with in the various States.

ART 2. The deliveries of coin or of values necessitated by the execution of the present arrangement will be: In France, at Paris, Lyons, or Marseilles; in Greece, at Athens; in Italy, at Rome, Geneva, Milan, or Tunis; in Switzerland, at Berne, Basle, Geneva, or Zurich.

ART. 3. Each of the contracting States shall retire from circulation the 5-franc silver pieces bearing the impression of the other States of the union; such withdrawal from circulation shall be completed by the 1st day of October of the year following the expiration of the present convention. Beginning with said date all the silver coins above mentioned may be refused by the public treasuries elsewhere than in the country in which they originated. The State which continues to admit them shall have power to receive them only on its own account and not on account of the State which shall have issued them.

On the 15th of January of the following year, after the proper offsets shall have been made, the account of the pieces retired from circulation shall be definitively settled, by nationality, in each of the States, and they shall be reciprocally given due and legal notice of said account in the form usual between States. The balance, if any shall exist at said date, shall be held by the State holding it at the disposition of the State which shall have stamped the pieces. The latter shall withdraw its pieces, making compensation therefor at their nominal value.

ART. 4. The compensation stipulated for in the preceding article shall be made in gold or in 5-franc silver pieces, stamped with the impress of the creditor State, or in drafts payable in said State, either in the same coins or in bank bills which are legal tender there.

Such compensation may be divided into payments made every three months in such way that the account shall be paid within a maximum term of five years, beginning with the day of the expiration of the convention. These terms may be always anticipated in whole or in parts.

An additional sum of 1 per cent per annum during the second, third, and fourth years, and of 1½ per cent during the fifth year on the amount of the sums to be refunded shall be paid. This interest shall be calculated from the 15th of January, the date of the resolutions fixing the balance to be withdrawn, and in case the terms have been anticipated, it shall undergo a proportional diminution.

ART. 5. All the cost of transportation, both of the balance of the silver coins to be returned to their own country and the values or specie intended to discharge the price of them, shall be borne by each State as far as the frontier.

ART. 6. In partial derogation to the preceding provisions, and with the intention of taking into account the exceptional situation of Switzerland, it is agreed:

(1) That the 5-franc pieces issued by France and retired from circulation in Switzerland, shall be remitted by the Federal Government to the French Government, which shall effect their refundment to Switzerland on the conditions hereinafter determined.

The French Government shall refund successively at sight, in Swiss pieces of 5 francs in silver, or in gold pieces of 10 francs or more, stamped under the conditions provided for by the convention, and this after the beginning of the year which shall follow the expiration of the said convention, all the shipments of 5-franc silver pieces issued by France and retired from circulation in Switzerland; provided, however, that the amount of each of these shipments shall not be less than 1,000,000 nor greater than 10,000,000 of francs, except the final balance, which may be less than 1,000,000 francs.

However, the reimbursement to be made in gold, by the French Government to the Federal Government, for the repurchase of the French pieces of 5 francs in silver, shall not exceed the sum of 60,000,000 of francs.

(2) That the silver 5-franc pieces issued by Italy and retired from circulation in Switzerland shall be remitted by the Federal Government to the Italian Government, which, from the beginning of the year following the expiration of the convention, shall refund them successively at sight, in Swiss 5-franc silver pieces and in gold pieces of 10-francs and over, stamped subject to the conditions of the said convention, or in drafts at sight on Berne, Basle, Geneva, or Zurich, payable subject to the conditions provided for in paragraph 1 of article 4 of the present arrangement. The amount of each of these shipments of Italian 5-franc silver pieces shall not be less than 500,000 francs, with the exception of the final balance, nor more than 2,000,000 francs.

The successive refundments to be made by the Italian Government to the Federal Government shall, as a general rule, consist, to the extent of two-thirds at least, of gold pieces and of Swiss 5-franc silver pieces, and the remainder of bills or drafts subject to the conditions determined on in the preceding paragraph. Should any exception be made to this rule the proportion shall be restored on the basis of the

following reimbursement; provided, however, that the Italian Government shall not be bound to refund in gold or 5-franc silver Swiss pieces, to the Swiss Government, a sum total greater than 20,000,000, and the total refundments to be effected in coin and in bills or drafts, by the Italian Government to the Federal Government, for the aggregate operation of the exchange or repurchase of the Italian 5-franc silver pieces circulating in Switzerland, shall not exceed the sum of 50,000,000 of francs.

ART. 7. The present arrangement shall be ratified and the ratifications thereof exchanged at the same time as those of the monetary convention concluded this day between the four States.

DECLARATION.

(1) The Hellenic Government, trusting to the different stipulations of article 8 of the monetary convention dated this day, and desirous of giving on its own part, to the duration of the union, all the guarantee in its power, enters into the following engagement:

So long as compulsory circulation shall be maintained in Greece, the free coinage of silver shall not be resumed. After the suppression, free coinage shall not be resumed without a previous agreement with France and Italy.

(2) The Federal Swiss Government declares that the obligation stipulated in the second paragraph of article 12 of the monetary convention concluded and dated this day shall be put in execution in Switzerland only within the limits of Federal legislation on banks of issue.

This reservation, made in favor of the Swiss Federal Government, shall be recorded and properly certified to such Government.

In witness whereof the subscribing plenipotentiaries, duly authorized to that end, have signed the present declaration, which shall be considered, approved, and sanctioned by the respective Governments without any further special ratification, by the sole fact of the exchange of the ratifications of the monetary convention to which it relates.

AN ACT additional to the monetary convention of November 6, 1885, signed December 12, 1885 between Belgium, France, Greece, Italy, and Switzerland.

The signatory Governments of the monetary convention concluded at Paris, November 6, 1885, having agreed to leave Belgium the power to enter anew, as a contracting party, into the union, reconstituted by said convention and the Belgian Government, desiring to make use of that power—

The undersigned, duly authorized to that effect, have agreed to the following provisions:

ARTICLE 1. The Belgian Government gives its adhesion to the monetary convention signed at Paris November 6, 1885, between France, Greece, Italy, and Switzerland, as well as to the declaration and arrangement annexed thereto. On their part, the Governments of France, Greece, Italy, and Switzerland make a record of the adhesion of the Belgian Government and give their assent thereto.

ART. 2. The National Bank of Belgium shall receive the 5-franc silver pieces of the countries of the union on conditions identical with those under which it receives the Belgian 5-franc silver pieces during the duration of the convention, as is determined for the Bank of France, by article 3 of the convention.

ART. 3. The quota of the pieces of silver of 2 francs, of 1 franc, of 50 centimes, and 20 centimes, which may be struck and issued by Belgium, on the conditions of articles 4 and 9 of the convention, is fixed at 35,800,000 francs. From this sum shall be deducted the sum of the quantities already issued up to the present time by the Belgian Government. By way of exception, Belgium is authorized to manufacture coins of these categories to the amount of 5,000,000 of francs, out of the silver 5-franc pieces which it shall remelt.

ART. 4. Departing to some extent from articles 3 and 4 of the arrangement annexed to the convention of November 6, the following provisions, in the nature of arbitration, are ordered:

If at the date of January 15, indicated in section 3 of article 3 of said arrangement, the French Government should, after the proper set-off is made, happen to be the holder or possessor of a balance of Belgian 5-franc silver pieces, that balance shall be divided into two equal parts.

The Belgian Government shall refund the half of said balance, conformably to article 4 of the arrangement.

It agrees to introduce into its monetary régime no change which might hinder the return to Belgium of the other half through the avenues of trade and of exchange. This engagement shall have a duration of five years, beginning with the expiration

of the union. Belgium may terminate it by accepting the obligation to refund this second half, on the conditions provided for by article 4 of the arrangement. However, the Belgian Government reserves to itself the power to introduce into its monetary legislation such changes as shall have been made in the monetary legislation of France.

The Belgian Government guarantees that the balance shall not exceed 200,000,000 of francs. Should it exceed this amount, it shall be refunded in accordance with the conditions provided in article 4 of the arrangement.

On the other hand, should the Belgian Government, on the dissolution of the union, happen to be the holder of a balance of French 5-franc silver pieces, the French Government reserves the power of calling on Belgium to apply the provisions agreed to in the present article.

ART. 5. The French and Italian Governments reserve to themselves the right of demanding the application of the provisions stipulated in the preceding article in the settlement of their mutual accounts, at the time of the dissolution of the union, the minimum of the balance being fixed between them at the same figure, 200,000,000 francs.

ART. 6. Belgium undertakes to refund to Switzerland, one after another, at sight, in Swiss pieces of 5 francs in silver, or in gold pieces of 10 francs or more, stamped in accordance with the conditions of the convention, and this from the beginning of the year following the expiration of the said convention, all shipments of pieces of 5 francs in silver issued by Belgium and retired from circulation in Switzerland. The sum total of each of these shipments shall not be below 1,000,000 nor above 2,000,000 of francs; only the final balance may be less than 1,000,000 francs: *Provided, however,* That the refundings to be made in gold or in Swiss pieces of 5 francs in silver, by the Belgian Government to the Swiss Federal Government for the purchase of Belgian 5-franc silver pieces, shall not exceed the sum of 6,000,000 francs.

If the balance to be liquidated should exceed the sum of 6,000,000 of francs, Belgium pledges itself to introduce into its monetary system no change of a character to prevent the return, through the avenues of trade or of exchange, of the said excess, and this during a period of five years, beginning with the expiration of the union, or during such period as shall be agreed upon between France and Belgium to the same end.

ART. 7. In case of dissolution of the union the deliveries of specie or of values in fulfillment of the arrangement annexed to the convention of November 6 shall be made—in France, at Paris, Lille, Lyon, or Marseilles; and in Belgium, at Brussels or at Anvers.

ART. 8. The present act, additional to the monetary convention of November 6, 1885, shall be ratified, and the ratifications shall be exchanged at Paris at the same time as that of the said convention.

In witness whereof the subscribers have drawn up the present document and invested it with their seals.

DECLARATION.

At the moment of signing by Belgium, France, Greece, Italy, and Switzerland the act additional to the monetary convention concluded November 6, 1885, the subscribing plenipotentiary of His Majesty the King of the Hellenes declares that his Government reserves the right of demanding, in favor of Greece, when compulsory circulation shall have been abolished in that country, the proportional application of the provisions agreed upon between France and Belgium in the said additional act, in the settlement of their mutual accounts on the dissolution of the union.

This reservation is agreed to by the subscribing plenipotentiaries of Belgium, France, Italy, and Switzerland.

Done at Paris, five original copies hereof being made, December 12, 1885.

The weight, etc., of the coins of the Latin Union, expressed in grains, are shown in the following table:

GOLD.

Denomination.	Weight.	Fineness.	Pure gold contained.	Value in United States gold coin.
	Grains.	*Thousandths.*	*Grains.*	
100 francs	497.806	900	448.025	$19.295
50 francs	248.903	900	224.012	9.647
20 francs	99.561	900	89.605	3.859
10 francs	49.780	900	44.802	1.929
5 francs	24.890	900	22.401	.964

SILVER.

Denomination.	Weight.	Fineness.	Pure silver contained.	Value compared with silver in United States silver dollars.
	Grains.	*Thousandths.*	*Grains.*	
5 francs	385.800	900	347.220	$0.935
2 francs	154.320	835	128.857	.347
1 franc	77.160	835	64.428	.174
50 centimes	38.580	835	32.214	.087
20 centimes	15.432	835	12.886	.035

MEXICO.

Mexico has the single silver standard.

The principal provisions of the laws governing the monetary system of Mexico are as follows:

The dollar (el peso) is the unit of account fixed by article 1 of the law of November 28, 1867.

The legal standard is the silver dollar, and the pieces into which it is divided are: The 50 cents, 25 cents, 10 cents, 5 cents, standard coin. All these coins should contain the fineness of 0.902+[0.777 of 0.001], according to article 4 of said law.

The gold coins are: Pieces of $20, $10, $5, $2.50, and $1. The fineness of all these kinds of coin is 0.875, and the weight of each of them is as follows:

	Grams.		Grams.
$20 pieces	33.841	$2.50 pieces	4.230
$10 pieces	16.920	$1 pieces	1.692
$5 pieces	8.460		

All silver coins have a fineness of 0.902+[0.777 of 0.001] and are:

	Grams.		Grams.
$1 piece	27.073	10 cent piece	2.707
50 cent piece	13.536	5 cent piece	1.352
25 cent piece	6.768		

The mints of the republic receive for coinage or assay whatever quantities may be presented by individuals, whether of gold or silver.

The coinage charge on silver is paid at the rate of 4.41 per cent and on gold 4.61 per cent of their respective values.

In the payment of government dues or taxes no fixed amount in gold or silver is exacted, and payment is admited in any of the coins in legal circulation.

In exceptional cases, and not as a general rule, the "tolerance" or difference allowed more or less as "mint remedy" for the fineness of gold must not exceed 0.002 of the legal fineness of 0.875; and for silver, 0.003 of the legal fineness of 0.902 + [0.777 of 0.001].

The "tolerance" or "mint remedy" allowed on the weight of coin is:

In gold coin:

$20 piece	milligrams	75	$2.50 piece	milligrams	38
$10 piece	do	50	$1 piece	do	25
$5 piece	do	38			

In silver coin:

$1 piece	decigram	1	10 cent piece	milligrams	50
50 cent piece	milligrams	75	5 cent piece	do	25
25 cent piece	do	50			

The are eleven mints in the country.

The Mexican silver dollar circulates not only in Mexico, but, under the name of piaster, is the current coin of several countries in America, Asia, and Africa.

The denominations, weight, fineness, etc., of the coins of Mexico, expressed in grains, are as follows:

GOLD.

Denomination.	Weight.	Fineness.	Pure gold contained.	Value in United States gold coin.
	Grains.	*Thousandths.*	*Grains.*	
20 pesos	522.234	875	456.954	$19.679
10 pesos	261.117	875	228.477	9.839
5 pesos	130.558	875	114.238	4.919
2½ pesos	65.279	875	57.129	2.459
Peso	26.111	875	22.847	.984

SILVER.

Denomination.	Weight.	Fineness.	Pure silver contained.	Value compared with silver in United States silver dollar.
	Grains.	*Thousandths.*	*Grains.*	
Peso	417.790	902 7/10	377.170	$1.016
50 centavo	208.895	902 7/10	188.585	.508
25 centavo	104.447	902 7/10	94.292	.254
10 centavo	41.779	902 7/10	37.717	.102
5 centavo	20.889	902 7/10	18.859	.051

THE NETHERLANDS.

The fundamental monetary laws of the Netherlands at the present time are those of November 26, 1847, and June 6, 1875. By the former law the Netherlands adopted the silver standard, and maintained it in force until 1872, the monetary unit being the silver florin of the legal weight of ten grams 0.945 fine.

In 1872 a bill was passed to suspend the coinage of silver on private account. The fall in the value of silver continuing, the mint was closed to its coinage, and for the time being Holland had really no metallic standard of value, for gold was only a commodity. The balance of the indebtedness happened then to be favorable to Holland, and the foreign exchanges fell considerably. In order to arrest this fall, a bill was passed in 1877 opening the mint to the public for the coinage of gold, making the new standard coin a 10-florin gold piece, weighing 6.048 grams of fine gold, thus establishing the ratio in coinage of gold to silver of 1 to 15.625.

Holland is usually classed as a double-standard country. It would be more correct to say that it has a gold standard, conjointly with the circulation, as legal tender, of the silver coins issued before 1875. The currency is in the same provisional state of the so-called limping standard as in France, but the balance of indebtedness having also been rather in favor of Holland, no inconvenience has been felt arising out of the present arrangement, and the foreign exchanges have adjusted themselves as if Holland possessed a gold standard. Up to the present only 10-florin gold pieces, with a tolerance of fineness of 1½ thousandths and a weight of 2 thousandths have been stamped.

The coinage charges are, for gold, 5 florins per kilogram 0.900 fine, equal to 5.50 florins per kilogram fine, or 3½ per cent.

The mint is not bound to accept less than 100 kilograms for coinage.

Out of the kilogram of pure gold there are manufactured 1,653.43 florins; out of the kilogram of pure silver, 105.82 florins.

The ducat and double ducat are trade coins. Besides these, the law of November 26, 1847, had authorized the mintage of another trade coin, called the gouden-willem, weighing 6.729 grams, fineness 0.900. There were also 2 gouden-willem and one-half gouden-willem pieces. None of these coins are now stamped.

The monetary system of the Dutch colonies is the same as that of the mother country.

The coins of the Netherlands are—

GOLD.

Denomination.	Weight.	Fineness.	Pure gold contained.	Value in United States gold coin.
	Grains.	*Thousandths.*	*Grains.*	
10 florins	103.703	900	93.332	$4.019

SILVER.

Denomination.	Weight.	Fineness.	Pure silver contained.	Value compared with silver in United States silver dollar.
	Grains.	*Thousandths.*	*Grains.*	
Rixdaler (2½ florins)	385.800	945	364.581	$0.982
Florin	154.323	945	145.852	.393
Half florin	77.160	945	72.916	.196
Quarter florin	55.170	640	35.308	.095
Tenth florin	21.604	640	13.824	.037
Twentieth florin	10.571	640	6.765	.018

NORWAY. (See Scandinavian Union.)

PARAGUAY.

The money account of Paraguay is the peso, divided into 8 reals. It is also divided into 100 centavos. The country, however, has a depreciated paper currency. The gold onza is rated officially at 17½ paper pesos, making the paper peso equal to 1.3617 grams, or 21.0137544 grains, of fine gold. Five-franc pieces, venezolanos, and other piasters of the same kind, are, in like manner, reckoned as equivalent to 1½ paper pesos.

PERSIA.

Ten shahis equal 1 penebat; 2 penebats equal 1 sahibghiran, or kran; 10 krans equal 1 toman, or 200 shahis equal 1 toman.

The principal coin is the kran, a silver piece of 71.065 grains 0.900 fine. The krans which circulate vary, however, greatly, as the mints of the country are not reliable, being farmed out for a yearly sum. The fineness of the coins oscillates between 0.760 and 0.900. In larger transactions the toman is taken as the unit, reckoned equal to 10 krans. There are some gold tomans and half tomans in existence, but they are not the standard; they circulate only as commercial money, and are taken by weight. The standard is silver. The weight, etc., of the 2-toman and 1-toman pieces are as follows:

GOLD.

Denomination.	Weight.	Fineness.	Pure gold contained.	Value in United States gold coin.
	Grains.	*Thousandths.*	*Grains.*	
2 tomans	87.962	900	79.166	$3.409
Toman	43.981	900	39.583	1.704

PERU.

The unit, the silver sol, weighs 25 grams 0.900 fine. It is therefore equal to the French 5-franc piece. Gold coins exist also, of 2, 5, 10, and 20 sols. Their fineness is 0.900, and the 20-sol piece weighs 32.258 grams. This gives a ratio of silver to gold of 1 to 15½.

For a long time the country had an inconvertible paper money, but since the war this paper has become almost worthless, and in consequence only hard sols are now in circulation, valued according to the price of silver.

The weight, etc., of the Peruvian coins authorized by law, expressed in grains, are as follows:

GOLD.

Denomination.	Weight.	Fineness.	Pure gold contained.	Value in United States gold coin.
	Grains.	*Thousandths.*	*Grains.*	
20 sols	497.806	900	448.025	$19.295
10 sols	248.903	900	224.012	9.647
5 sols	124.451	900	112.006	4.823
2 sols	49.780	900	44.802	1.929
Sol	24.890	900	22.401	.964

SILVER.

Denomination.	Weight.	Fineness.	Pure silver contained.	Value compared with silver in United States silver dollar.
	Grains.	*Thousandths.*	*Grains.*	
Sol	385.800	900	347.220	$0.935
Half sol	192.900	900	173.610	.468
Fifth sol	77.160	900	69.444	.187
Dinero	38.580	900	34.722	.094
Half dinero	19.290	900	17.361	.047

PORTUGAL.

The present monetary system of Portugal was established by the law of July 29, 1854, and is gold monometallic with the milreis of 1,000 reis as monetary unit. One thousand milreis or 1,000,000 reis is called a conto.

The gold coins are:

Denomination.	Legal weight.	Fineness.	Fine weight.
	Grams.	*Thousandths.*	*Grams.*
Crown or 10 milreis	17.735	916⅔	16.2570
Half crown or 5 milreis	8.868	916⅔	8.1285
Fifth crown or 2 milreis	3.547	916⅔	3.2514
Tenth crown or 1 milreis	1.774	916⅔	1.6257

Gold is coined in unlimited amounts on private account at a mint charge of 1 milreis per kilogram.

Silver like copper, is coined only in divisional coins.

The silver coins are:

Denomination.	Legal weight.	Fineness.	Fine weight.
	Grams.	*Thousandths.*	*Grams.*
5 testones or 500 reis	12.50	916⅔	11.4583
2 testones or 200 reis	5.00	916⅔	4.5833
Testone or 100 reis	2.50	916⅔	2.2916
Half testone or 50 reis	1.25	916⅔	1.1458

Silver is legal tender only to the amount of 5 milreis, but by Lisbon commercial usage one-third of all payments are accepted in that metal.

The weight, fineness, etc., of the coins of Portugal expressed in grains are as follows:

GOLD.

Denomination.	Weight.	Fineness.	Pure gold contained.	Value in United States gold coin.
	Grains.	*Thousandths.*	*Grains.*	
Crown	273.686	916⅔	250.878	$10.804
Half crown, 5 milreis	136.843	916⅔	125.439	5.402
Fifth crown, 2 milreis	54.736	916⅔	50.175	2.161
Tenth crown, 1 milreis	27.368	916⅔	25.088	1.080

SILVER.

Denomination.	Weight.	Fineness.	Pure silver contained.	Value compared with silver in United States silver dollar.
	Grains.	*Thousandths.*	*Grains.*	
500 reis	192.900	916⅔	176.825	$0.476
200 reis	77.160	916⅔	70.730	.190
100 reis	38.580	916⅔	35.365	.095
50 reis	19.290	916⅔	17.682	.048

ROUMANIA.

The laws of April 14, 1867, and April 30, 1879, introduced the system of the Latin Union into Roumania, the franc being called the lei and the centime the bani; but in 1890 a measure was passed by the Roumania Chamber abrogating the double standard and substituting for it the single gold standard, with a subsidiary silver coinage having a paying power to the amount of 50 lei or francs.

The weight, fineness, etc., of the coins of Roumania are as follows:

GOLD.

Denomination.	Weight.	Fineness.	Pure gold contained.	Value in United States gold coin.
	Grains.	*Thousandths.*	*Grains.*	
20 leis	99.561	900	89.605	$3.859
10 leis	49.780	900	44.802	1.929

SILVER.

Denomination.	Weight.	Fineness.	Pure silver contained.	Value compared with silver in United States silver dollar.
	Grains.	*Thousandths.*	*Grains.*	
5 leis	385.800	900	347.220	$0.935
2 leis	154.323	835	128.857	.347
Lei	77.160	835	64.428	.174
Half lei	38.580	835	32.214	.087

RUSSIA.

The fundamental monetary law of the country is dated December 17, 1885, and went into force January 1, 1886. The monetary unit is the silver ruble of 100 kopecks. The law provides for the coinage of both gold and silver in the ratio of 1 to 15½; the system is, therefore, bimetallic. The gold coins are the imperial (10 rubles) and half imperial (5 rubles), of the legal weight of 12.9039 and 6.4519 grams, respectively, and the fineness of 0.900. The imperial, therefore, contains 11.6135 grams of pure gold and the half imperial 5.8067.

The coinage of gold on private account is unlimited, and the mint charge is 3 per cent for that metal.

The full legal-tender silver coins are the ruble, half ruble, and quarter ruble pieces. The silver ruble has a legal weight of 19.995 grams, a fineness of 0.900, and contains 17.996 grams of fine silver.

The half and quarter ruble are of the same fineness and of proportional weight. The divisional coins of Russia are of silver and copper.

The silver divisional coins are:

Denomination.	Legal weight.	Fineness.	Fine weight.
	Grams.	*Thousandths.*	*Grams.*
20 kopecks	3.599	500	1.799
15 kopecks	2.699	500	1.349
10 kopecks	1.799	500	.899
5 kopecks	.899	500	.449

These coins are legal tender to the amount of 3 rubles between individuals and unlimited legal tender to the State for taxes, etc.

The coinage of silver on private account is suspended.

Such is the monetary system of Russia as it stands upon the statute book, but it has no existence in fact, that country having been under an exclusively paper-money régime since 1855.

The weight, fineness, etc., of the coins of Russia expressed in grains are as follows:

GOLD.

Denomination.	Weight.	Fineness.	Pure gold contained.	Value in United States gold coin.
	Grains.	*Thousandths.*	*Grains.*	
Imperial (10 rubles)	199.133	900	179.219	$7.718
Half imperial (5 rubles)	100.987	916⅔	92.571	3.986
Half imperial (5 rubles)	99.566	900	89.609	3.859
Ducat (3 rubles)	60.593	916⅔	55.543	2.392

SILVER.

Denomination.	Weight.	Fineness.	Pure silver contained.	Value compared with silver in United States silver dollar.
	Grains.	*Thousandths.*	*Grains.*	
Ruble prior to 1886	319.927	868 $\frac{1}{12}$	277.714	$0.748
Ruble since 1886	308.571	900	277.714	.748
50 kopecks prior to 1886	159.963	868 $\frac{1}{12}$	138.857	.374
50 kopecks since 1886	154.285	900	138.857	.374
25 kopecks prior to 1886	79.982	868 $\frac{1}{12}$	69.428	.187
25 kopecks since 1886	77.143	900	69.428	.187
20 kopecks	55.540	500	27.770	.075
15 kopecks	41.655	500	20.827	.056
10 kopecks	27.770	500	13.885	.037
5 kopecks	13.885	500	6.942	.019

SCANDINAVIAN UNION.

The Scandinavian Monetary Union embraces Sweden, Norway, and Denmark. These three kingdoms concluded in 1873 and 1875 a monetary convention based on the employment of the single gold standard and on a common system of coins and money of account. The krone or crown, divided into 100 öre, is the monetary unit.

The gold coins are:

Denomination.	Legal weight.	Fineness.	Fine weight.
	Grams.	*Thousandths.*	*Grams.*
20 crowns	8.9606	900	8.06454
10 crowns	4.4803	900	4.03227

The divisional silver coins are:

Denomination.	Legal weight.	Fineness.	Fine weight.
	Grams.	*Thousandths.*	*Grams.*
2 crowns	15.000	800	12.000
1 crown	7.500	800	6.000
50 öre	5.000	600	3.000
40 öre	4.000	600	2.400
25 öre	2.420	600	1.452
10 öre	1.450	400	0.580

Two thousand four hundred and eighty kronen are manufactured out of 1 kilogram of fine gold. The coinage of gold is unlimited. The coinage charges for gold are one-quarter per cent per kilogram fine for 20-kronen pieces, and one-third per cent per kilogram fine for 10-kronen pieces. Silver is coined only on account of the Government.

Silver coins are legal tender as follows: The 2-kronen and 1-krone pieces to the amount of 20 kronen; the 50, 40, 25 and 10 öre pieces to the amount of 5 kronen.

All the coins above mentioned have legal currency in the three kingdoms. The monetary convention does not limit the coinage by the governments of the silver or bronze coins. In each of the three States there are public treasuries at which any sum of fractional coin divisible by 10 kronen may be exchanged for gold.

The weight, etc., of the coins of the Scandinavian Union, expressed in grains, are as follows:

GOLD.

Denomination.	Weight.	Fineness.	Pure gold contained.	Value in United States gold coin.
	Grains.	*Thousandths.*	*Grains.*	
20 crowns	138.280	900	124.452	$5.359
10 crowns	69.140	900	62.226	2.679

SILVER.

Denomination.	Weight.	Fineness.	Pure silver contained.	Value compared with silver in United States silver dollar.
	Grains.	*Thousandths.*	*Grains.*	
2 crowns	231.480	800	185.184	$0.499
1 crown	115.740	800	92.592	.249
50 öre	77.160	600	46.296	.125
40 öre	61.780	600	37.038	.100
25 öre	37.345	600	22.407	.060
10 öre	22.376	400	8.950	.024

SERVIA.

The monetary system of Servia was assimilated to that of the Latin Union by the law of November 11, 1878. The franc is called the dinar, and the centime the para. It was provided that after the gold pieces had been put in circulation the 5-dinar pieces should be legal tender only to the amount of 500 dinars, and the smaller silver pieces only to the amount of 50 dinars, thus making the country practically gold monometallic.

The weight, fineness, etc., of the coins of Servia are as follows:

GOLD.

Denomination.	Weight.	Fineness.	Pure gold contained.	Value in United States gold coin.
	Grains.	*Thousandths.*	*Grains.*	
Milan (20 dinars)	99.561	900	89.605	$3.859
Half milan (10 dinars)	49.780	900	44.802	1.929

SILVER.

Denomination.	Weight.	Fineness.	Pure silver contained.	Value compared with silver in United States silver dollar.
	Grains.	*Thousandths.*	*Grains.*	
5 dinars	385.800	900	347.220	$0.935
2 dinars	154.323	835	128.857	.347
Dinar	77.160	835	64.423	.174
Half dinar	38.580	835	32.214	.087

SIAM.

The moneys of Siam are as follows:

800 cowries equal 1 fuang; 2 fuango equal 1 salung; 4 salungo equal 1 bat or tical; 4 bats equal 1 tämling; 20 tämling equal 1 chäng; 50 chäng equal 1 häp; 100 häp equal 1 tära.

Cowries (also called bia in Siam) are the well-known shells used in many parts of Asia and Africa as a medium of exchange for small values. In Siam about 219 or 220 are reckoned equal to 1 penny sterling, which corresponds closely to the general rating of the bat or tical at 2s. 6d. sterling; this is, however, more than the actual average value of the coin, which is $0.60.

Small pewter and copper coins have of late been introduced as a substitute for the cowrie shell. The pewter coins are called lot and at; they are small flat bits of pewter; 2 lots equal 1 at.

The copper coin 2 ats, and about the same size as the English halfpenny, only a little thicker, is called song péis. Two song péis equal 1 fuang; 2 fuango equal 1 salung; 4 salungo equal 1 bat or tical.

The fuang and the salung are flat pieces of silver. They represent simply a certain weight of the metal. It is the same with the bat.

The coin called bat or tical is a small bit of a silver bar bent and with the ends beaten together. It has two or three small stamps impressed upon it. The weight of the bat or tical ranges between 212 and 236 grains troy, and is generally taken at 236 grains (15.292 grams).

The fineness of the tical, as well as that of the fuang and salung, averages 906.25, it is said. Taking the average weight of the tical, or bat, at 224 grains, the average fineness of the coin at 906.25, the metallic value may be computed at 2s. 3.4325d sterling (at 60d. per ounce British standard silver). This corresponds closely to the rating of the tical by the merchants in the Siamese ports, where 7 ticals are reckoned equal to 4 Spanish piastres or dollars.

The mint at Bangkok lately exchanged Mexican dollars against ticals, at the rate of 5 ticals equal 3 Mexican dollars. American silver dollars are also taken by the mint; they are weighed against Mexican dollars, and then paid for at the above rate of 5 ticals for 3 Mexican dollars.

Exchange on Hongkong and Singapore is quoted in per cent premium or discount. If the quotations fall to 1 per cent or more discount, Mexican dollars are being sent from China to Siam.

Exchange on London is quoted in shillings and pence per 1 Mexican dollar. If payments are made in ticals, it is at the rate of 5 ticals for 3 Mexican dollars.

SPAIN.

By a decree of the 19th of October, 1868, Spain adopted the monetary system of the Latin Union. It is, therefore, bimetallic, with the silver peseta, equivalent to the franc, as monetary unit. It has the same gold and silver coins as the union. A gold 25-peseta piece was added by a decree of August 20, 1876.

The gold coins are:

Denomination.	Legal weight.	Fineness.	Fine weight.
	Grams.	*Thousandths.*	*Grams.*
100 pesetas	32.25806	900	29.0323
50 pesetas	16.12903	900	14.5161
25 pesetas	8.06451	900	7.2580
20 pesetas	6.4516	900	5.8064
10 pesetas	3.2258	900	2.9032
5 pesetas	1.6129	900	1.4516

The silver coins are:

Denomination.	Legal weight.	Fineness.	Fine weight.
	Grams.	*Thousandths.*	*Grams.*
5 pesetas	25.0	900	22.5000
2 pesetas	10.0	835	8.3500
1 peseta	5.0	835	4.1750
Half peseta	2.5	835	2.0875
Fifth peseta	1.0	835	.8350

The coinage of gold is free, and there is no coinage charge for that metal, but depositors cannot get the coined gold until eighteen days after the delivery of the bullion to the mint.

Since 1878 silver has been coined only on account of the State.

The ratio of gold to silver is 1 to 15½. Gold and the 5-peseta silver piece are unlimited legal tender; divisional silver coin, i. e., all silver coins of less value than 5 francs, only to the amount of 50 pesetas.

The following table shows the weight, etc., of the coins of Spain, expressed in grains:

GOLD.

Denomination.	Weight.	Fineness.	Pure gold contained.	Value in United States gold coin.
	Grains.	*Thousandths.*	*Grains.*	
25 pesetas	124.451	900	112.006	$4.823
10 pesetas	49.780	900	44.802	1.929
5 pesetas	24.890	900	22.401	.964

SILVER.

Denomination.	Weight.	Fineness.	Pure silver contained.	Value compared with silver in United States silver dollar.
	Grains.	*Thousandths.*	*Grains.*	
5 pesetas	385.800	900	347.220	$0.935
2 pesetas	154.323	835	128.857	.347
Peseta	77.160	835	64.428	.174
50 centimes	38.580	835	32.214	.087
20 centimes	15.432	835	12.886	.035

SWEDEN. (See Scandinavian Union.)

SWITZERLAND. (See Latin Union.)

TURKEY.

The monetary system of Turkey is bimetallic, with the piaster, equal to 40 paras, 3 aspes, as monetary unit. The gold coins are the 500, 250, 100, 50, and 25 piaster pieces, all of the same fineness, viz, 0.916⅔. The 100-piaster piece, or gold medjidie, is called the Turkish pound. It has a gross weight of 7.216 grams and a fine weight of 6.6146 grams. The gross and fine weight of the other are proportional to those of the Turkish pound. The silver coins are the 20, 10, 5, 2, 1, and half piaster pieces, 0.830 fine. The 20-piaster piece has a gross weight of 24.055 grams and a fine weight of 19.9656 grams.

The 10, 5, 2, 1, and half piasters have a proportional gross and fine weight. The ratio of gold to silver was originally 1 to 15.09.

By a decree the Government lowered the value of the 20-piaster piece to 19 piasters, in consequence of which debasement the ratio of gold to silver is 1 to 15⅞

The coinage of silver is suspended. The mint charge for gold is 1 per cent. Such is the system as it exists on paper, but the actual coined money of the country is in a very unsatisfactory condition.

The following table shows the weight, etc., of the coins of Turkey expressed in grains:

GOLD.

Denomination.	Weight.	Fineness.	Pure gold contained.	Value in United States gold coin.
	Grains.	*Thousandths.*	*Grains.*	
500 piasters	556.817	916⅔	510.416	$21.982
250 piasters	278.408	916⅔	255.208	10.991
100 piasters	111.363	916⅔	102.082	4.396
50 piasters	55.681	916⅔	51.041	2.198
25 piasters	27.840	916⅔	25.520	1.099

SILVER.

Denomination.	Weight.	Fineness.	Pure silver contained.	Value compared with silver in United States silver dollars.
	Grains.	*Thousandths.*	*Grains.*	
20 piasters	371.216	830	308.104	$0.830
10 piasters	185.608	830	154.052	.415
5 piasters	92.804	830	77.026	.207
2 piasters	37.121	830	30.810	.083
Piaster	18.560	830	15.405	.042
Half piaster	9.280	830	7.703	.021

UNITED STATES.

In 1786 the Congress of the Confederation chose as the monetary unit of the United States the dollar of 375.64 grains of pure silver. This unit had its origin in the Spanish piaster or milled dollar, which constituted the basis of the metallic circulation of the English colonies in America. It was never coined, there being at that time no mint in the United States.

The act of April 2, 1792, established the first monetary system of the United States. The bases of the system were: The gold dollar, containing 24.75 grains of pure gold, and stamped in pieces of $10, $5, and $2½, denominated, respectively, eagles, half eagles, and quarter eagles; the silver dollar, containing 371.25 grains of pure silver. A mint was established. The coinage was unlimited and there was no mint charge. The ratio of gold to silver in coinage was 1:15. Both gold and silver were legal tender. The standard was double.

The act of 1792 undervalued gold, which was therefore exported. The act of June 28, 1834, was passed to remedy this, by changing the mint ratio between the metals to 1:16.002. This latter act fixed the weight of the gold dollar at 25.8 grains, but lowered the fineness from 0.916⅔ to 0.899225. The fine weight of the gold dollar was

thus reduced to 23.2 grains. The act of 1834 undervalued silver as that of 1792 had undervalued gold, and silver was attracted to Europe by the more favorable ratio of 1:15¼. The act of January 18, 1837, was passed to make the fineness of the gold and silver coins uniform. The legal weight of the gold dollar was fixed at 25.8 grains, and its fine weight at 23.22 grains. The fineness was, therefore, changed by this act to 0.900 and the ratio to 1:15.988+.

Silver continued to be exported. The act of February 21, 1853, reduced the weight of the silver coins of a denomination less than $1, which the acts of 1792, 1834, and 1837 had made exactly proportional to the weight of the silver dollar, and provided that they should be legal tender to the amount of only $5. Under the acts of 1792, 1834, and 1837 they had been full legal tender. By the act of 1853 the legal weight of the half dollar was reduced to 192 grains and that of the other fractions of the dollar in proportion. The coinage of the fractional parts of the dollar was reserved to the Government.

The act of February 12, 1873, provided that the unit of value of the United States should be the gold dollar of the standard weight of 25.8 grains, and that there should be coined besides the following gold coins: A quarter eagle, or 2½-dollar piece; a 3-dollar piece; a half eagle, or 5-dollar piece; an eagle, or 10-dollar piece, and a double eagle, or 20-dollar piece, all of a standard weight proportional to that of the dollar piece. These coins were made legal tender in all payments at their nominal value when not below the standard weight and limit of tolerance provided in the act for the single piece, and when reduced in weight they should be legal tender at a valuation in proportion to their actual weight. The silver coins provided for by the act were a trade dollar, a half dollar, or 50-cent piece, a quarter dollar, and a 10-cent piece; the weight of the trade dollar to be 420 grains Troy; the half dollar 12½ grams; the quarter dollar and the dime, respectively, one-half and one-fifth of the weight of the half dollar. The silver coins were made legal tender at their nominal value for any amount not exceeding $5 in any one payment. The charge for converting standard gold bullion into coin was fixed at one-fifth of 1 per cent. Owners of silver bullion were allowed to deposit it at any mint of the United States to be formed into bars or into trade dollars, and no deposit of silver for other coinage was to be received.

Section II of the joint resolution of July 22, 1876, recited that the trade dollar should not thereafter be legal tender, and that the Secretary of the Treasury should be authorized to limit the coinage of the same to an amount sufficient to meet the export demand for it. The act of March 3, 1887, retired the trade dollar and prohibited its coinage. That of September 26, 1890, discontinued the coinage of the 1-dollar and 3-dollar gold pieces.

The act of February 28, 1878, directed the coinage of silver dollars of the weight of 412½ grains Troy, of standard silver, as provided in the act of January 18, 1837, and that such coins, with all silver coins theretofore coined, should be legal tender at their nominal value for all debts and dues, public and private, except where otherwise expressly stipulated in the contract.

The Secretary of the Treasury was authorized and directed by the first section of the act to purchase from time to time silver bullion at the market price thereof, not less than $2,000,000 worth nor more than $4,000,000 worth per month, and to cause the same to be coined monthly, as fast as purchased, into such dollars. A subsequent act, that of July 14, 1890, enacted that the Secretary of the Treasury should purchase silver bullion to the aggregate amount of 4,500,000 ounces, or so much thereof as might be offered, each month, at the market price thereof, not exceeding $1 for 371.25 grains of pure silver, and to issue in payment thereof Treasury notes of the United States, such notes to be redeemable by the Government, on demand, in coin, and to be legal tender in payment of all debts, public and private, except where otherwise expressly stipulated in the contract. The act directed the Secretary of the Treasury to coin each month, 2,000,000 ounces of the silver bullion purchased under the provisions of the act into standard silver dollars until the 1st day of July, 1891, and thereafter as much as might be necessary, to provide for the redemption of the Treasury notes issued under the act. The purchasing clause of the act of July 14, 1890, was repealed by the act of November 1, 1893.

The act of June 9, 1879, made the subsidiary silver coins of the United States legal tender to the amount of $10. The minor coins are legal tender to the amount of 25 cents.

A brief history of the coins of the United States is hereto appended.

COINS OF THE UNITED STATES, AUTHORITY FOR COINING, AND CHANGES IN WEIGHT AND FINENESS AND AMOUNT COINED.

GOLD COINS.

DOUBLE EAGLE.

Authorized to be coined, act of March 3, 1849.
Weight, 516 grains; fineness, 0.900.
Total amount coined to June 30, 1896, $1,277,693,220.

EAGLE.

Authorized to be coined, act of April 2, 1792.
Weight, 270 grains; fineness, 0.916⅔.
Weight changed, act of June 28, 1834, to 258 grains.
Fineness changed, act of June 28, 1834, to 0.899,225.
Fineness changed, act of January 18, 1837, to 0.900.
Total amount coined to June 30, 1896, $266,538,270.

HALF EAGLE.

Authorized to be coined, act of April 2, 1792.
Weight, 135 grains; fineness, 0.916⅔.
Weight changed, act of June 28, 1834, to 129 grains.
Fineness changed, act of June 28, 1834, to 0.899,225.
Fineness changed, act of January 18, 1837, to 0.900.
Total amount coined to June 30, 1896, $220,631,035.

QUARTER EAGLE.

Authorized to be coined, act of April 2, 1792.
Weight, 67.5 grains; fineness 0.916⅔.
Weight changed, act of June 28, 1834, to 64.5 grains.
Fineness changed, act of June 28, 1834, to 0.899,225.
Fineness changed, act of January 18, 1837, to 0.900.
Total amount coined to June 30, 1896, $28,711,015.

THREE-DOLLAR PIECE.

Authorized to be coined, act of February 21, 1853.
Weight, 77.4 grains; fineness, 0.900.
Total amount coined to September 26, 1890, $1,619,376.
Coinage discontinued, act of September 26, 1890.

ONE DOLLAR.

Authorized to be coined, act of March 3, 1849.
Weight, 25.8 grains; fineness, 0.900.
Total amount coined to September 26, 1890, $19,499,337.
Coinage discontinued, act of September 26, 1890.

SILVER COINS.

DOLLAR.

Authorized to be coined, act of April 2, 1792.
Weight, 416 grains; fineness, 0.892,4.
Weight changed, act of January 18, 1837, to 412½ grains.
Fineness changed, act of January 18, 1837, to 0.900.
Coinage discontinued, act of February 12, 1873.
Total amount coined to February 12, 1873, $8,031,238.
Coinage reauthorized, act of February 28, 1878.
Amount coined from March 1, 1878, to June 30, 1896, $430,790,041.
Total amount coined to June 30, 1896, $438,821,279.

TRADE DOLLAR.

Authorized to be coined, act of February 12, 1873.
Weight, 420 grains; fineness, 0.900.
Coinage limited to export demand, joint resolution July 22, 1876.
Coinage discontinued, act of February 19, 1887.
Total amount coined, $35,965,924.

HALF DOLLAR.

Authorized to be coined, act of April 2, 1792.
Weight, 208 grains; fineness, 0.892,4.
Weight changed, act of January 18, 1837, to 206¼ grains.
Fineness changed, act of January 18, 1837, to 0.900.
Weight changed, act of February 21, 1853, to 192 grains.
Weight changed, act of February 12, 1873, to 12½ grams, or 192.9 grains.
Total amount coined to June 30, 1896, $132,662,308.

COLUMBIAN HALF DOLLAR.

Authorized to be coined, act of August 5, 1892.
Weight, 192.9 grains; fineness, 0.900.
Total amount coined, $2,501,052.50.

QUARTER DOLLAR.

Authorized to be coined, act of April 2, 1792.
Weight, 104 grains; fineness, 0.892,4.
Weight changed, act of January 18, 1837, to 103¼ grains.
Fineness changed, act of January 18, 1837, to 0.900.
Weight changed, act of February 21, 1853, to 96 grains.
Weight changed, act of February 12, 1873, to 6¼ grams, or 96.45 grains.
Total amount coined to June 30, 1896, $51,166,166.75.

COLUMBIAN QUARTER DOLLAR.

Authorized to be coined, act of March 3, 1893.
Weight, 96.45 grains; fineness, 0.900.
Total amount coined, $10,005.75.

TWENTY-CENT PIECE.

Authorized to be coined, act of March 3, 1875.
Weight, 5 grams, or 77.16 grains; fineness, 0.900.
Coinage discontinued, act of May 2, 1878.
Total amount coined, $271,000.

DIME.

Authorized to be coined, act of April 2, 1792.
Weight, 41.6 grains; fineness, 0.892,4.
Weight changed, act of January 18, 1837, to 41¼ grains.
Fineness changed, act of January 18, 1837, to 0.900.
Weight changed, act of February 21, 1853, to 38.4 grains.
Weight changed, act of February 12, 1873, to 2½ grams, or 38.58 grains.
Total amount coined to June 30, 1896, $28,904,300.50.

HALF DIME.

Authorized to be coined, act of April 2, 1792.
Weight, 20.8 grains; fineness, 0.892,4.
Weight changed, act of January 18, 1837, to 20⅝ grains.
Fineness changed, act of January 18, 1837, to 0.900.
Weight changed, act of February 21, 1853, to 19.2 grains.
Coinage discontinued, act of February 12, 1873.
Total amount coined, $4,880,219.40.

THREE-CENT PIECE.

Authorized to be coined, act of March 3, 1851.
Weight, 12½ grains; fineness, 0.750.
Weight changed, act of March 3, 1853, to 11.52 grains.
Fineness changed, act of March 3, 1853, to 0.900.
Coinage discontinued, act of February 12, 1873.
Total amount coined, $1,282,087.20.

MINOR COINS.

FIVE CENT (NICKEL).

Authorized to be coined, act of May 16, 1866.
Weight, 77.16 grains; composed of 75 per cent copper and 25 per cent nickel.
Total amount coined to June 30, 1896, $14,292,235.30.

THREE CENT (NICKEL).

Authorized to be coined, act of March 3, 1865.
Weight, 30 grains; composed of 75 per cent copper and 25 per cent nickel.
Coinage discontinued, act of September 26, 1890.
Total amount coined, $941,349.48.

TWO CENT (BRONZE).

Authorized to be coined, act of April 22, 1864.
Weight, 96 grains; composed of 95 per cent copper and 5 per cent tin and zinc.
Coinage discontinued, act of February 12, 1873.
Total amount coined, $912,020.

CENT (COPPER).

Authorized to be coined, act of April 2, 1792.
Weight, 264 grains.
Weight changed, act of January 14, 1793, to 208 grains.
Weight changed by proclamation of the President, January 26, 1796, in conformity with act of March 3, 1795, to 168 grains.
Coinage discontinued, act of February 21, 1857.
Total amount coined, $1,562,887.44.

CENT (NICKEL).

Authorized to be coined, act of February 21, 1857.
Weight, 72 grains; composed of 88 per cent copper and 12 per cent nickel.
Coinage discontinued, act of April 22, 1864.
Total amount coined, $2,007,720.

CENT (BRONZE).

Coinage authorized, act of April 22, 1864.
Weight, 48 grains; composed of 95 per cent copper and 5 per cent tin and zinc.
Total amount coined to June 30, 1896, $8,073,910.34.

HALF CENT (COPPER).

Authorized to be coined, act of April 2, 1792.
Weight, 132 grains.
Weight changed, act of January 14, 1793, to 104 grains.
Weight changed by proclamation of the President, January 26, 1796, in conformity with act of March 3, 1795, to 84 grains.
Coinage discontinued, act of February 21, 1857.
Total amount coined, $39,926.11.

TOTAL COINAGES.

Gold	$1,814,692,253.00
Silver	696,464,343.10
Minor	27,830,048.67
Grand total	2,538,986,644.77

Besides gold and silver and certificates of deposit of gold and silver with the Treasury, the circulation of the United States consists of Government and national-bank notes.

VENEZUELA.

The monetary unit is the venezolano or peso, divided into 100 centavos, a silver coin weighing 25 grams, 0.900 fine, or equal to the French silver 5-franc piece. There are also gold coins equal to the French gold pieces. The one-fifth venezolano piece is called the "bolivar," equal to 1 franc.

The ratio of gold to silver is 1 to 15½. The only difference between the French monetary system and that of Venezuela is that whereas the French 5-franc piece is unlimited legal tender, the 5-bolivar piece or venezolano is legal tender only to the amount of 500 bolivars, or about $100 in United States gold coin. In this respect Venezuela is more like a single gold-standard country. For convenience, however, it is generally classed among double-standard countries.

The weight, fineness, etc., expressed in grains of the coins of Venezuela are as follows:

GOLD.

Denomination.	Weight.	Fineness.	Pure gold contained.	Value in United States gold coin.
	Grains.	*Thousandths.*	*Grains.*	
100 bolivars	497.806	900	448.025	$19.295
50 bolivars	248.903	900	224.012	9.647
20 bolivars	99.561	900	89.605	3.859
10 bolivars	49.780	900	44.802	1.929
5 bolivars	24.890	900	22.401	.964

SILVER.

Denomination.	Weight.	Fineness.	Pure silver contained.	Value compared with silver in United States silver dollar.
	Grains.	*Thousandths.*	*Grains.*	
5 bolivars	385.800	900	347.220	$0.935
2 bolivars	154.323	835	128.857	.337
Bolivar	77.160	835	64.428	.174
Half bolivar	38.580	835	32.214	.087
Fifth bolivar	15.432	835	12.886	.035

LIII.—SUMMARY OF MONETARY EVENTS SINCE 1786.

1786.—Establishment of the double standard in the United States with a ratio of 1 to 15.25; that is, on the basis of 123.134 grains of fine gold for the half eagle or $5 piece, and 375.64 grains of fine silver for the dollar, without any actual coinage.

1792.—Adoption of the ratio of 1 to 15 and establishment of a mint with free and gratuitous coinage in the United States; the silver dollar equal to 371¼ grains fine, the eagle to 247½ grains fine.

1803.—Establishment of the double standard in France on the basis of the ratio of 1 to 15½, notwithstanding the fact that the market ratio was then about 1 to 15.

1810.—Introduction of the silver standard in Russia on the basis of the ruble of 17.99 grams of fine silver, followed in 1871 by the coinage of imperials or gold pieces of 5 rubles, of 5.998 grams, therefore with a ratio of 1 to 15. This ratio was changed by the increase of the imperial to 5 rubles 15 copecks, and later to 1 to 15.45.

1815.—Great depreciation of paper money in England, reaching 26½ per cent in May. Course of gold, £5 6s., and of silver, 71½d. per ounce standard. In December the loss was only 6 per cent. Gold at this period was quoted at £4 3s., and silver at 64d.

1816.—Abolition of the double standard in England which had had as its basis the ratio of 1 to 15.21, and adoption of the gold standard on the basis of the pound sterling at 7.322 grams fine in weight.

Coinage of divisional money at the rate of 66d. per ounce. Extreme prices, £4 2s. for gold and 64d. for silver; in January, £3 18s. 6d., and 59¼d. in December.

1816.—Substitution for the ratio of 1 to 15.5 in Holland, established by a rather confused coinage, of the ratio of 1 to 15⅞.

1819.—Abolition of forced currency in England. Price of gold £3 17s. 10½d. and of silver, 62d.[1] per ounce in October, against £4 1s. 6d. and 67d. in February.

1832.—Introduction of the monetary system of France in Belgium with a decree providing for the coinage of pieces of 20 and 40 francs, which, however, were not stamped. Silver, 59¼d.

1834.—Substitution of the ratio of 1 to 16 for that of 1 to 15 in the United States by reducing the weight of the eagle, $10 gold piece, from 270 grains to 258 grains.

In 1837 the fineness of the United States gold coins was raised from 0.899225 to 0.900, and the silver coins from 0.8924 to 0.900, giving a ratio of 1 to 15.988 and fixing the standard weight of the silver dollar at 412½ grains. Silver, 59 5/16d.

1835.—Introduction of the company rupee, a piece of silver weighing 165 grains fine, in India, in place of the sicca rupee. Creation of a trade coin—the mohur, or piece of 15 rupees—containing 165 grains of fine gold. Silver, 59 11/16d.

1844.—Introduction of the double standard in Turkey, with the ratio of 1 to 15.10. Silver, 59½d.

1847.—Abolition of the double standard in Holland by the introduction of the silver standard on the basis of a 1-florin piece 0.945 grams fine, the coinage of which had already been decreed in 1839. Silver, 59 11/16d.

1847.—Discovery of the gold mines of California.

1848.—Coinage in Belgium of pieces of 10 and 25 francs in gold, a shade too light. These pieces were demonetized and withdrawn from circulation in 1884. Silver, 59½d.

1848.—Replacing the ratio of 1 to 16 in Spain, which had been in force since 1786, by that of 1 to 15.77.

1850.—Introduction of the French monetary system in Switzerland without any actual coinage of gold pieces. Silver, 60 1/16d.

1851.—Discovery of the gold mines of Australia.

1853.—Lowering of the weight of silver pieces of less value than $1 to the extent of 7 per cent in the United States, and limitation of their legal-tender power to $5. Silver, 61½d.

1853.—Maximum of the production of gold reached in California, when it amounted to $65,000,000.

1854.—Introduction of the gold standard in Portugal on the basis of the crown of 16.257 grams fine. Before this period the country had the silver standard, with a rather large circulation of gold coins stamped on the basis of 1 to 15½ in 1835 and 1 to 16½ in 1847. Silver, 61½d.

1854.—Modification of the ratio of 1 to 15.77 in Spain by raising it to 1 to 15.48, and by lowering the piaster from 23.49 grams to 23.36 grams fine.

1854.—Introduction of the silver standard, as it existed in the mother country, in Java, in place of the ideal Javanese money, and coinage of colonial silver pieces.

1857.—Conclusion of a monetary treaty between Austria and the German States, in accordance with which 1 pound of fine silver (one-half a kilogram) was stamped into 30 thalers or 52½ florins of south Germany, or 45 Austrian florins, resulting in 1 thaler equaling 1¾ German florins or 1½ Austrian florins. Silver, 61¾d.

1861.—Law decreeing the coinage of gold pieces of 10 and 20 francs exactly equal to French coins of the same denomination in Belgium. Silver, 61¾d.

1862.—Adoption of the French monetary system by Italy. Silver, 61 7/16d.

1865.—Formation of the Latin Union between France, Belgium, Switzerland, and Italy on the basis of a ratio of 1 to 15½. Silver, 61 7/16d.

1867.—First international monetary conference held in Paris.

1868.—Adoption of the French monetary system by Roumania, with the exclusion of the 5-franc silver piece, which was, however, stamped in 1881 and 1883. Silver, 60½d.

1868.—Admission of Greece into the Latin Union. The definite and universal introduction of the French monetary system into the country was effected only in 1883.

1868.—Adoption of the French monetary system, with the peseta or franc as the unit, by Spain. The coinage of gold alphonses d'or of 25 pesetas was made only in 1876.

1871.—Replacing of the silver standard in Germany by the gold standard. Coin-

[1] The price of silver given hereafter represents the average rate per ounce standard—that is, the mean between the highest price and the lowest price quoted during the year.

age in 1873 of gold pieces of 5, 10, and 20 mark pieces, the latter weighing 7.168 grams fine. Silver, 60¼d.

1871.—Establishment of the double standard in Japan with the ratio of 1 to 16.17 by the coinage of the gold yen of 1.667 grams and of the silver yen of 26.956 grams, both with a fineness of 0.900.

1873.—Increase of the intrinsic value of the subsidiary coins of the United States. Replacing of the double standard by the gold standard. Reduction of the cost of coinage of gold to one-fifth per cent, the total abolition of which charge was decreed in 1875. Creation of a trade dollar of 420 grains with a fineness of 0.900. Silver, 59¼d.

1873.—Suspension of the coinage of 5-franc pieces in Belgium.

1873.—Limitation of the coinage of 5-francs on individual account in France.

1873.—Suspension of the coinage of silver in Holland.

1873.—Formation of the Scandinavian Monetary Union. Replacing of the silver standard in Denmark, Sweden, and Norway by that of gold on the basis of the krone. Coinage of pieces of 10 and 20 kroner, the latter weighing 8.961 grams, with a fineness of 0.900.

1874.—Introduction of the system of contingents for the coinage of 5-franc silver pieces in the Latin Union. Silver, 58 5/16d.

1875.—Suspension of the coinage of silver on individual account in Italy. Silver, 56⅞d.

1875.—Suspension of the coinage of silver on account of the Dutch colonies.

1875.—Introduction of the double standard in Holland on the basis of the ratio of 1 to 15.62 by the creation of a gold piece of 10 florins, weighing 5.048 grams fine, with the maintenance of the suspension of the coinage of silver.

1876.—Great fluctuations in the price of silver, which declined to 46⅞d., representing the ratio of 1 to 20.172, in July. Recovery, in December, to 58½d. Average price, 52¾d.

1877.—Coinage of 5-franc silver pieces by Spain continued later, notwithstanding the decline of silver in the market. Silver, 54¾d.

1877.—Replacing of the double standard in Finland by that of gold on the basis of the mark or franc.

1878.—Act of United States Congress providing for the purchase, from time to time, of silver bullion, at the market price thereof, of not less than $2,000,000 worth per month as a minimum, nor more than $4,000,000 worth per month as a maximum, and its coinage as fast as purchased into silver dollars of 412½ grains. The coinage of silver on private account prohibited. Silver, 52 3/16d.

1878.—Meeting of the second international monetary conference in Paris. Prolongation of the Latin Union to January 1, 1886.

1879.—Suspension of the sales of silver by Germany. Silver, 51¼d.

1879.—Resumption of specie payment by the United States.

1881.—Third international monetary conference in Paris. Silver, 51 1/16d.

1885.—Introduction of the double standard in Egypt. Silver, 48⅝d.

1885.—Prolongation of the Latin Union to January 1, 1891.

1886.—Great decline in the price of silver, which fell in August to 42d., representing a ratio of 1 to 22.5, and recovery, in December, to 46d. Modification of the coinage of gold and silver pieces in Russia. Silver, 45⅜d.

1887.—Retirement of the trade dollars by the Government of the United States in February. Demonetization of the Spanish piasters, known as Ferdinand Carolus, whose reimbursement at the rate of 5 pesetas ended on March 11. New decline of silver in March to 44d., representing the ratio of 1 to 21.43. Silver, 44⅛d.

1890.—United States—Repeal of the act of February 28,1878, commonly known as Bland-Allison law, and substitution of authority for purchase of 4,500,000 fine ounces of silver each month to be paid for by issue of Treasury notes payable in coin. (Act of July 14, 1890.) Demonetization of 25,000,000 lei in pieces of 5 lei in Roumania in consequence of the introduction of the gold standard by the law of October 27. Silver, 47 1/16d.

1891.—Introduction of the French monetary system in Tunis on the basis of the gold standard. Coinage of national gold coins and billon. Silver, 45 1/16d.

1892.—Replacing of the silver standard in Austria-Hungary by that of gold by the law of August 2. Coinage of pieces of 20 crowns, containing 6.098 grams fine. The crown equals one-half florin. Meeting of the fourth international monetary conference at Brussels. Production of gold reaches its maximum, varying between 675,000,000 and 734,000,000 francs. Silver, 39 3/16d.

1893.—Suspension of the coinage of silver in British India and of French trade dollars on individual account. Panic in the silver market in July in London, when the price fell below 30d., representing the ratio of 1 to 31.43. Repeal of the purchasing clause of the act of July 14, 1890, by the Congress of the United States.

1895.—Adoption of the gold standard by Chile.

1895.—Russia decides to coin 100,000,000 gold rubles in 1896.

LIV.—DOCUMENTARY HISTORY OF THE COINAGE ACT OF FEBRUARY 12, 1873.

[Senate Mis. Doc. No. 132, Forty-first Congress, second session. Letter of the Secretary of the Treasury to the chairman of the Committee on Finance, communicating a report of John Jay Knox in relation to a revision of the laws pertaining to the Mint and coinage of the United States. April 28, 1870, referred to the Committee on Finance and ordered to be printed. May 2, 1870, ordered that 500 additional copies be printed for the use of the Treasury Department.]

TREASURY DEPARTMENT, *April 25, 1870.*

SIR: I have the honor to transmit herewith "A bill revising the laws relative to the mint, assay offices, and coinage of the United States," and accompanying report. The bill has been prepared under the supervision of John Jay Knox, Deputy Comptroller of the Currency, and its passage is recommended in the form presented. It includes, in a condensed form, all the important legislation upon the coinage, not now obsolete, since the first mint was established, in 1792; and the report gives a concise statement of the various amendments proposed to existing laws and the necessity for the change recommended. There has been no revision of the laws pertaining to the mint and coinage since 1837, and it is believed that the passage of the inclosed bill will conduce greatly to the efficiency and economy of this important branch of the government service.

I am, very respectfully, your obedient servant,

GEO. S. BOUTWELL,
Secretary of the Treasury.

Hon. JOHN SHERMAN,
Chairman Finance Committee, Senate of the United States.

TREASURY DEPARTMENT,
OFFICE OF COMPTROLLER OF THE CURRENCY,
Washington, April 25, 1870.

SIR: The last annual report of the Secretary of the Treasury contained the following paragraph:

"The mining and coining of the precious metals is now so large a national interest that it deserves more attention than it has hitherto received. At present there is no bureau or officer in the Treasury Department at Washington charged especially with the management of this great interest. I therefore recommend that provision be made for the appointment of a proper officer to be intrusted with this branch of the public business, under the direction of the Secretary of the Treasury.

"The coinage of the country is diminished in amount by the fact that in England and France the mint expenses are much less than with us. It would no doubt have a tendency to prevent the export of the precious metals in the form of bullion if the mint charges were to be reduced or altogether abolished."

In accordance with your request, made some weeks since, to prepare a bill which should include these recommendations, and also present in a concise form every important provision contained in the different laws relative to the mint and coinage, I have the honor to hand you herewith "A bill revising the laws relative to the mint, assay offices, and coinage of the United States."

The method adopted in the preparation of the bill was first to arrange in as concise a form as possible the laws now in existence upon these subjects, with such additional sections and suggestions as seemed valuable. Having accomplished this, the bill, as thus prepared, was printed upon paper with wide margin, and in this form transmitted to the different mints and assay offices, to the First Comptroller, the Treasurer, the Solicitor, the First Auditor, and to such other gentlemen as are known to be intelligent upon metallurgical and numismatical subjects, with the request that the printed bill should be returned with such notes and suggestions as experience and education should dictate. In this way the views of more than thirty gentlemen who are conversant with the manipulation of metals, the manufacture of coinage, the execution of the present laws relative thereto, the method of keeping accounts, and of making returns to the department, have been obtained with but little expense to the department, and little inconvenience to correspondents. Having received these suggestions, the present bill has been framed, and is believed to comprise within the compass of eight or ten pages of the revised statutes every important provision contained in more than sixty different enactments upon the mint, assay offices, and coinage of the United States, which are the result of nearly eighty years of legislation upon these subjects.

PROPOSED AMENDMENTS.

The new features of the bill now submitted are, chiefly: the establishment of a Mint Bureau at the Treasury Department, which shall also have charge of the collection of statistics relative to the precious metals; the consolidation of the office of superintendent with that of the treasurer, thus abolishing the latter office, and disconnecting the mint entirely from the office of assistant treasurer; the repeal of the coinage charge and authorizing the exchange of unparted for refined bars; a reduction in the amount of wastage and the tolerance (deviation in weight and fineness) in the manufacture of coin; requiring the token coinage to be of one material of uniform value, and to be redeemed under proper regulations when issued in excess, and the expense of its manufacture to be paid from specific appropriations and not from the gain arising in its manufacture as heretofore; an entire change in the manner of issuing the silver (subsidiary) coinage; discontinuing the coinage of the silver dollar; limiting the amount of silver to be used as alloy, so as to make the gold coinage of uniform color; the destruction of the dies not in use annually; requiring vouchers to pass between the different officers of the mint in all transfers of bullion or coin; requiring increased bonds from officers of the mint, and authorizing each officer to nominate his subordinate before appointment; and also making it an offense to increase or diminish the weights used in the mint.

LOCATION OF MINT AT PHILADELPHIA—BRANCH MINTS.

The mint was located at Philadelphia by act of April 2, 1792, for the reason that at that time that city was the seat of government and the commercial center of the country. The act of January 18, 1837, gave to the Director of the Mint the supervision of the mint and branches. Two years previous, March 3, 1835, an act had been passed establishing branch mints at New Orleans, at Charlotte, North Carolina, and Dahlonega, Georgia. There was no expectation that any large amount of bullion would be deposited at these institutions, and they were established rather to gratify the desire for the establishment of mints in the South than from any motive of sound national policy, and their supervision was placed under the control of the Mint at Philadelphia. Eleven years later, January 19, 1848, gold was discovered in California, and twenty-two years later, June, 1859, silver (the Comstock lode) in Nevada. In July, 1852, the branch mint in San Francisco, and in March of the next year the assay office in New York were authorized and, following out former precedents, these institutions were placed under the control and regulation of the Director of the Mint.

MINT BUREAU REQUIRED.

This supervision has been merely nominal. In the year 1856, large losses—nearly a quarter of a million of dollars ($235,073.12)—occurred in the office of the melter and refiner in San Francisco, and a committee, and subsequently a special agent, was sent by the Secretary of the Treasury to examine that institution, who reported great irregularities in its management, and the amount of the deficiency, no portion of which was ever recovered. An examination was also made by direction of the Secretary in the year 1866, which exhibited large differences in the accounts of the coiner and the treasurer, which could have easily been traced to the responsible party if the different officers of the mint had been required in their transfers of bullion to take and receive the ordinary receipts required in business transactions. During the present year, the examinations which have been made by your direction into the affairs of the branch mints at San Francisco and Denver, and of the assay office of New York, have disclosed other irregularities, resulting in large losses to the Government, which might easily have been prevented by periodical examinations conducted by competent persons. The examination into the affairs of the assay office in New York in particular exhibited the fact that vouchers had been paid for many years by different treasurers of that office without requiring the approval of the different officers for whom the supplies had been ordered, and that these vouchers had been transmitted to the department and passed upon by the accounting officers of the Treasury, it not being considered a part of their duty to examine vouchers transmitted to them from the mints and assay offices to ascertain if the regulations of the Mint at Philadelphia had been followed. No official examination of the assay office in New York by the Director of the Mint, as far as can be ascertained, has ever taken place, and it was with difficulty that a copy of the regulations of the Mint for the transaction of business could be found.

A large portion of the business of the Mint at Philadelphia is the manufacture of the minor coinage. The total amount of copper, bronze, and copper-nickel coinage which has been issued at the Mint is $10,407,603.55; prior to the year 1858 the total issue was $1,662,813.55; the balance, $8,744,790, has all been issued during the last twelve years.

The expense of the manufacture of this coinage has been paid from the gain arising from the conversion of copper, bronze, and copper-nickel into coin having a nominal value much exceeding its intrinsic value. The amount paid into the treasury during the past twelve years from this source has been $4,225,000, so that the minor coinage has been manufactured at a cost of more than one-half of its nominal value. If the manufacture of this coinage had been under the supervision of an officer not influenced by the clamor for patronage, and independent of all local pressure, its cost would not probably have been more than one-third of its nominal value.

The national banks of the country are subject to examinations annually, or oftener, by experts, and a corps of special agents are continually in the service looking after the interests of the government in connection with the custom-houses and the depositories of public money. The mints and assay offices of the United States should at all times be subject to like inspection. The Mint at Philadelphia is one of the institutions requiring this supervision. Its coinage is only about one-sixth of its sister institution in San Francisco and its deposits about one-third of the assay office in New York, so that if the officers of each establishment are equally well qualified the Mint in Philadelphia has no right to claim the supervision of establishments more favorably located for receiving deposits of bullion. Moreover, an officer located at the seat of government, by the opportunity afforded him of interviews with different persons from all parts of the country, would be more likely to learn the wants and views of each section in its relation to the business of this office. Having the supervision of the statistics pertaining to the development of the mining industry of the precious metals, as provided for in the bill, and the opportunity of obtaining valuable information from other departments of the government, he would be able at all times to furnish the most accurate data relative to the annual production and the amount of the precious metals existing in the country, and annually exhibit, in concise and well-arranged tables, statistics relative to the coinage of the country and of the world. He would require frequent reports in reference to all business transactions at the different establishments, and would carefully scrutinize all vouchers made to the department before they are passed to the accounting officers for final settlement. Having made personal visitations to the different institutions, he would be able to criticise the estimates of each establishment (the annual estimates for the mint service during the year 1870, as presented by the Director without amendment, were $826,526) and to reduce these estimates within proper limits before they are transmitted to Congress. He would hold the same relation to the institutions under his charge that the Treasurer of the United States holds toward the different assistant treasurers and the officers of customs and other heads of departments toward their subordinates. Finally, by devoting his time to the consideration of these subjects he would be able to present intelligent views upon "the mining and coinage of the precious metals, which is now so large a national interest as to demand more attention than it has heretofore received."

DISCONTINUANCE OF THE OFFICE OF TREASURER.

The office of the treasurer of the mint in the proposed bill has been abolished, and his duties transferred to the superintendent. The only objection to this change is that the office of the superintendent should be kept distinct, so that he may be a check upon the treasurer. This is unnecessary. In the proposed bill the assayer, who determines the value of bullion, is required to countersign the certificate issued to the depositor, who is himself present and watchful for his own interest. A sufficient check upon the purchase of supplies will be to require, as at present, the approval of the officer for whose use such supplies are ordered, upon all vouchers before payment. The business of the different assistant treasurers has of late years been very much increased. The office of treasurer of the mint is in every instance in a building disconnected from that of the assistant treasurer, and the business is usually performed by subordinates. It is, moreover, impossible to examine in a satisfactory manner the office of an assistant treasurer who holds at the same time the office of treasurer of the mint, without first closing the mint, precipitating the bullion in solution, and ordering a general settlement of the institution, a proceeding which requires many days, and which is not usually performed oftener than once a year.

OFFICERS TO NOMINATE THEIR SUBORDINATES.

The bill also increases the bonds of the operative officers of the mint, and authorizes them to nominate their subordinates, subject to the approval of the superintendent, before they are submitted for appointment. This provision will prevent an excess of workmen, make each officer responsible for the men employed, and prevent the forcing of incompetent and undesirable subordinates upon the different officers. Authority is also given for obtaining the services of skilled artisans in the preparation of dies for coinage.

AUTHORITY TO EXCHANGE UNPARTED BARS FOR REFINED BULLION.

It is not proposed in the present bill to increase or diminish the charges for refining bullion, but to encourage the refining of gold and silver bullion by private parties, and to authorize under proper regulations the exchange of unparted bars for refined bullion, thus reducing the expense and unavoidable wastage consequent upon that process. It is well understood upon the Pacific coast that private parties can refine bullion at a much less rate than the mint. This is owing, in the first place, to the fact that private parties can use the sulphuric-acid process, which is much cheaper than the nitric-acid process of the mint; and secondly, that the deposits at the mint in San Francisco are chiefly in gold, when it is absolutely necessary that there should be two parts of silver mixed with one part of gold in solution, in order successfully to part the one from the other. The mint must, therefore, purchase silver to be used for this purpose, and use at a loss a much larger amount of acid than is necessary for the manipulation of the bullion deposited. Private refiners have too much silver; the mint too little; an exchange can therefore take place beneficial to both parties without the slightest risk to the government, and with a contingent benefit to the miner and the depositor.

REPEAL OF THE COINAGE CHARGE.

An act has recently passed the English Parliament[1] authorizing, as hitherto, payment in coin to depositors of refined bullion without charge. The coinage charge at the French mint is about one-fifth of one per cent; our present charge is one-half of one per cent. Our coinage charge it is now proposed to abolish, in order to conform to the practice of our own mint prior to the act of February 21, 1853, and for the reason that it should be the policy of the government to hinder rather than encourage the export of bullion. Our present laws have the effect to induce bankers to ship bullion as a commodity for the purpose of making sterling exchange. A very intelligent gentleman upon the Pacific coast, who is thoroughly familiar with this question, in a recent publication thus refers to the subject:

"I do not desire to be understood as arguing that any change of our mint laws will put a stop to the export of the precious metals when it becomes necessary for the adjustment of the balance of trade. That is one of those inexorable commercial necessities so well understood that it would be folly to pretend to the discovery of any expedient that would obviate it. My proposition simply is that when the balance of trade is not against us the precious metals are exported as commodities for the profit on their out-turn above the par of exchange, or may be so exported in excess of what the balance of trade requires. In other words, when the market is abundantly supplied with commercial bills with which bankers could cover their own exchange they still prefer to ship bullion, not only as being a safer remittance, but as also furnishing a profit on the out-turn equal to, or perhaps exceeding, the discount on commercial bills. Furthermore, that while the balance may be against us in the aggregate, yet, with reference to particular periods of time and to particular countries, it may be in our favor, and that a nation may become an importer of the precious metals as commodities without reference to the balance of trade. Such, indeed, is our daily experience here. While we are exporting our unrefined gold and silver to Europe and our refined metals to China we are importing gold from British Columbia and silver from Mexico. While in the last ten years we have exported $612,000,000 of our native product we have imported $157,000,000 of foreign treasure, and yet we receive no practical benefit from it as a means of increasing our metallic circulation; for it no sooner reaches our market than it commands a premium above its value in our mint for reexport, when it is in the form of bullion; and when in [foreign] coins it only entails a loss upon American commerce, as they are received abroad at a greater valuation than they will realize either in our market or at our mints; and we are, therefore, in every event, and under every condition of trade, the loser. That as the commercial value of gold as a commodity is greater than its value in our mints our own production seeks other markets uncoined, and that of other nations avoids ours. While, however, there is a profit in the export of uncoined bullion, taken at its valuation in our mints, there is always a loss on the export of our coins taken at their current value. The result, therefore, of modifying

[1] "Where any person brings to the mint any gold bullion, such bullion shall be assayed and coined and delivered out to such person *without any charge for such assay or coinage or for waste in coinage: Provided*, That (1) if the fineness of the whole of the bullion so brought to the mint is such that it can not be brought to the standard fineness under this act of the coin to be coined thereout, without refining some portion of it, the master of the mint may refuse to receive, assay, or coin such bullion. (2) Where the bullion so brought to the mint is finer than the standard fineness under this act of the coin to be coined thereout, there shall be delivered to the person bringing the same such additional amount of coin as is proportionate to such superior fineness. No undue preference shall be shown to any person under this section, and every person shall have priority according to the time at which he brought such bullion to the mint for assay or coinage." (*Section 3, English "coinage act, 1870."*)

our mint charges so as to conform to those of other nations would be to raise the coining value of gold at home above its commercial value and thereby make it more valuable for coinage than for export. It would, therefore, all seek our mints for coinage; and when once coined would be the very last thing anyone would want to ship, and never would be exported except in cases of absolute necessity, and when no other medium of exchange could be procured."

Hon. H. R. Linderman, late Director of the Mint, in his recent report to the department upon the branch mint at San Francisco, confirms this statement:

"My attention was attracted to the very small amount of refining and coinage executed at the branch mint at San Francisco, compared with the production of the country, and I was naturally led to inquire for an explanation. A due examination of the subject soon satisfied me as to the cause, which I found to be that, under our present system of mint laws, bullion has a higher commercial value for export than for coinage in the mint, which not only affects the local interests of that coast, but, in view of the diminishing product of the precious metals, becomes a question of national importance. The reason for this is that as gold and silver are chiefly valuable for the purpose of manufacturing money the cost incidental to coinage necessarily determines the value of the bullion. I find, on comparison, and especially at San Francisco, that the expenses of coinage are much greater than abroad, and hence our metallic product commands a higher price in foreign countries than can be realized by its coinage at home. The principal charge tending to produce this result is that of half of one per cent for coinage, which is above that of any other nation, and especially France and England, where most of our gold bullion is exported.

"The importance of this subject had presented itself in a measure to me while I was Director of the Mint, and in my annual report for 1868 I recommended its reduction from a half to a quarter of one per cent; but my examination at San Francisco has led me to consider the subject more thoroughly, and I am convinced that it should be abrogated altogether, and that we should return to our uniform practice prior to 1853, which was to coin gold without charge, not only as an expedient for encouraging coinage, but as being more consistent with the theory of money as a universal standard of value. A few examples will demonstrate the fact that bullion is, as I have before stated, of greater commercial value in our markets for export than for coinage at the mint. An unparted stamped bar (ounces 42.24 gross, 892 thousandths fine of gold, 98 fine of silver, and 10 parts base metal) deposited at branch mint, San Francisco:

Value of gold		$778.87
Value of silver		4.85
Premium on silver, 4 per cent		.19
Branch mint, gross value		783.91
Deductions.		
Refining charge, 11 cents per ounce, gross	$4.65	
Coinage charge, one-half of one per cent	3.91	
		8.56
Net branch mint return		775.35
Same bar sold in market as bullion stamped. ounces 42.240; 892 fine (sold at par 892)	$778.87	
Less one-eighth of one per cent, assay charge	.97	
		777.90
Difference in favor of sale in market		2.55
The same bar, if minted at New York or Philadelphia, gross value of bar		783.91
Deductions.		
Refining, 5 cents per ounce, gross	$2.11	
Coinage charge, same as at San Francisco	3.91	
		6.02
Net United States mint or United States assay office return		777.89
The same bar sold at New York at one-eighth on 900 would net		780.81
Difference against deposit for coinage and in favor of sale as bullion for export		2.92
The same bar deposited at San Francisco assaying works, gross value		783.91
Deductions.		
Refining, 8 cents per ounce, gross	$3.38	
Coinage charge	3.91	
		7.29
		776.62
Sold as bullion for export		777.90
Difference against deposit for coinage		1.28

"The net proceeds of the same bar, if coined without deduction of the half of one per cent for coinage, would be as follows:

	Coinage value.	Market value as bullion.	Difference in favor of coinage.
San Francisco branch mint	$779.26	$777.90	$1.36
Philadelphia mint and New York assay office	781.80	780.81	.99
San Francisco refining works	780.53	777.90	2.63

BASE METAL COINAGE.

The proposed bill authorizes the issue, as at present, of three and five cent copper-nickel coins, and in addition a one-cent piece of the same material. These coins are made redeemable in lawful money in sums of fifty dollars, and are legal tender in sums of twenty cents in any one payment. The proposed cent coin will be one and one-half grams in weight, a little heavier and a little larger than the present five-cent silver piece, which, together with the three-cent silver piece, is discontinued. The copper and bronze coins heretofore authorized are exchangeable for the copper-nickel coins. They will therefore gradually pass out of circulation, leaving eventually a minor coinage of one material and of uniform value. A suggestion was made to authorize the issue of but a single coin in addition to the gold and silver coinage now in existence, that piece to be one cent, into which all other base-metal coins shall be exchangeable; but the present copper-nickel coins are convenient and popular, and it was not thought best to withdraw them, but to provide for their redemption and the discontinuance of the issue when redundant.

ALLOWANCE FOR WASTAGE.

The present law authorized an allowance to the melter and refiner of two ounces of wastage on every thousand ounces of bullion manipulated; to the coiner one and one-half ounces on every thousand ounces of gold and two ounces on every thousand ounces of silver manipulated. In the proposed bill this allowance is reduced nearly one-half, the melter and refiner being allowed one-thousandth on gold and one and one-half thousandths on silver, and the coiner one-half of one thousandth on gold and one and one-half thousandths on silver. Experience in the mints and assay offices for some years past has shown that the present allowance is excessive, and that not one-fifth of that amount is required. The propriety of a reduction is therefore evident.

TOLERANCE IN FINENESS, EXISTING AND PROPOSED.

The law prescribes that the gold and silver coins shall be nine-tenths fine—that is to say, nine parts pure gold or silver and one part alloy. It is not practicable in the operations of the mints to conform exactly to the standard fineness, consequently a limit of variation, termed the "tolerance" or "remedy," is allowed under existing laws. This tolerance is two one-thousandths on gold and three one-thousandths on silver ingots prepared by the melter and refiner. In delivering ingots to the treasurer he is credited with the standard weight even though they are two-thousandths below it in fineness. The actual practice of the mint is not to approve ingots varying more than a half of one-thousandth, or one-fourth of the legal deviation allowed from the standard. It has been thought best, after careful consideration, to reduce the tolerance of fineness to one-thousandth on gold and two and one-half thousandths on silver.

TOLERANCE OF WEIGHT UNDER EXISTING LAWS.

It is also found impracticable to prepare coins of the precise weight prescribed by law, and a deviation therefrom is allowed. Under existing laws, the deviation in the double eagle, eagle, and half eagle is one-half grain troy,[1] or about two cents; in the quarter eagle, three-dollar and one-dollar gold pieces, one-quarter of a grain or one cent. In the silver coins it is greater than in gold coins, as the former are not usually adjusted by hand, the deviation being one and one-half grains (three-eighths of one cent) on the half dollar, one grain (one-quarter of one cent) on the quarter dollar, and one-half grain (one-eighth of one cent) upon the dime. To prevent an issue of light coins below the prescribed weight, but within the limits of tolerance, the law

[1] A grain of gold, of the standard fineness, is worth nearly four (3.876) cents; a pennyweight ninety-three (93.024) cents; and a grain of standard silver one-fourth (0.25001) of a cent.

prescribes that when a number of pieces are weighed together for delivery by the coiner to the treasurer, and by the latter to the depositor the deviation shall not exceed three pennyweights (value $2.79) in one thousand double eagles, two pennyweights (value $1.86) in one thousand eagles; and one and one-half pennyweights (value $1 39.5) in one thousand half eagles, and one pennyweight (value ninety-three cents) in one thousand dollar pieces.

TOLERANCE OF WEIGHT IN PROPOSED BILL; IN SINGLE PIECES AND IN BULK.

It has been deemed expedient to contract the allowance in weighing a number of pieces, as a more effectual check, and to protect the government and the public against the possibility of uniformly issuing coins of a light weight. The coiner is credited with the standard whether the coins are above or below the legal weight, provided they are within the limits of "tolerance." The bulk of our gold coinage is in double eagles, on which the allowance in the single piece is one-half grain; now if the law did not provide for weighing a large number of pieces together, there would be nothing to prevent a delivery to the treasurer of large amounts of these pieces each one of which might be three-eighths of a grain light. In delivering one million ounces, or twenty million dollars in double eagles, the coiner would be credited with the standard weight, although the actual weight would be about seven hundred and eighty-one ounces, or fourteen thousand five hundred and thirty dollars less than the amount required in weighing a number of pieces together. This allowance is unnecessarily large, and the limit has therefore been reduced, although still in excess of the actual results of the daily transactions of the mint.

In the proposed bill the deviation in weight allowed is as follows: In the double eagle, one-half grain troy; in the eagle, three-eighths of a grain; in the half eagle, one-quarter of a grain; in the three-dollar piece and quarter eagle, one-sixth of a grain; and in the dollar piece, one-twelfth of a grain; in the half and quarter dollar silver pieces, one grain; and in the dime, one-half grain. In weighing a large number of pieces together, the deviation allowed in five thousand dollars' worth of double eagles, eagles, half eagles, and quarter eagles is one-hundredth of an ounce (about eighteen cents), and in three thousand dollars' worth of three-dollar pieces it is seven and a half thousandths of an ounce; and in one thousand dollars' worth of dollar pieces, five-thousandths of an ounce; in one thousand dollars' worth of silver half and quarter dollar pieces, two-hundredths of an ounce; and in one hundred dollars' worth of dimes, one-hundredth of an ounce, the "tolerance" of weight being in the proposed bill only about one-fourth the amount now authorized in gold and one-third the amount in silver, taking into consideration the relative quantities of the several denominations now coined. Experience has shown that the provision for tolerance in bulk is judicious and effectual as a check against the issue of uniformly light pieces. It may be remarked that as far as ascertained the laws of other countries do not provide a tolerance for coins weighed in bulk. The "English coinage act of 1870," recently passed, makes no such provision.

METHOD OF ISSUING SILVER (SUBSIDIARY) COIN.

The act of February 21, 1853, provides that the silver coins of smaller denomination than one dollar "shall be paid out at the mint in exchange for gold coins at par in sums not less than one hundred dollars." It was evidently intended that these subsidiary or token coins should be issued only in exchange at par for gold coin. But the practice at the mint for many years has been to purchase all silver bullion offered at about $1.22½ per ounce, which is above the market price, paying therefor in silver coin. The ounce of silver purchased is worth $1.25 in the silver coin issued, weight for weight, so that the government really reserves a seigniorage of two and one-half cents per ounce. The effect of the mint practice has been to put in circulation silver coins without regard to the amount required for purposes of "change," creating a discount upon silver coin and bringing loss upon holders of any considerable amount. These coins are a legal tender for five dollars, but they are not received at the custom-house in payment of duties except for fractional portions of a dollar. The coins thus issued have accumulated, and are now at a large discount in Canada and California, and will again become burdensome at home when brought into circulation. The correct method of issuing silver coin is, as was originally contemplated: to purchase with gold such an amount of silver bullion at market rates as is needed for coinage into fractional parts of a dollar; to issue the silver coins only in exchange for gold at par, and to require the manufacture of such coinage to cease whenever there is evidence of a redundancy. In the proposed bill the language is clear and explicit on this point, and these silver coins are made a legal tender for sums less than one dollar.

HISTORY OF SILVER AND GOLD DOLLARS.

"The dollar unit, as money of account, was established by act of Congress April 2, 1792, and the same act provides for the coinage of a silver dollar 'of the value of a Spanish milled or pillar dollar, as the same is now current.' The silver dollar was first coined in 1794, weighing 416 grains, of which 371¼ grains were pure silver, the fineness being 892.4 thousandths. The act of January 18, 1837, reduces the standard weight to 412½ grains, but increases the fineness to 900 thousandths, the quantity of pure silver remaining 371¼ grains as before, and at these rates it is still coined in limited amount.

"The act of March 3, 1849, directs the coinage of gold dollars. They were issued the same year, weighing $25\frac{8}{10}$ grains, $\frac{9}{10}$ fine, 23.22 grains being pure gold. By the act of April 2, 1792, 371¼ grains of pure silver and 24¾ grains of pure gold were declared to be equivalent one with the other and to the dollar of account. At that time, as now, in Great Britain, 113 grains of pure gold were very nearly the equivalent of the pound sterling. The value of £1 in Federal money, therefore, was $4.565; prior to this date, and during the confederation, the dollar of account, as compared with sterling currency, had been rated at 4s. 6d., and in precise accordance with this valuation the congress of the confederation had established $4.444 as the custom-house value of the pound sterling. The effect of the act of 1792 was really to reduce the value of our dollar of account, but apparently to increase the value of the pound sterling about 2¾ per cent. By the act of June 28, 1834, the weight of fine gold to the dollar was reduced from 24.75 to 23.20 grains; and three years later, January 18, 1837, it was fixed at 23.22 grains, where it now remains. Comparing this latter weight with the pound sterling of 113 grains, we find an apparent increase of the value of £1 to $4.8665, an advance of almost exactly 9½ per cent upon the old valuation of $4.444. We have here the explanation of the existing practice in this countryof quoting sterling exchange at 9½ per cent premium when it is really at par."—New American Cyclopedia.

SILVER DOLLAR—ITS DISCONTINUANCE AS A STANDARD.

The coinage of the silver dollar piece, the history of which is here given, is discontinued in the proposed bill. It is by law the dollar unit, and assuming the value of gold to be fifteen and one-half times that of silver, being about the mean ratio for the past six years, is worth in gold a premium of about three per cent (its value being $1 03.12) and intrinsically more than seven per cent premium in our other silver coins, its value thus being $1 07.42. The present laws consequently authorize both a gold dollar unit and a silver dollar unit, differing from each other in intrinsic value. The present gold dollar piece is made the dollar unit in the proposed bill, and the silver dollar piece is discontinued. If, however, such a coin is authorized, it should be issued only as a *commercial dollar*, not as a standard unit of account, and of the exact value of the Mexican dollar,[1] which is the favorite for circulation in China and Japan and other oriental countries.

METRIC WEIGHTS RECOMMENDED FOR USE IN THE MINT.

In the proposed bill the weight and fineness of the gold and silver coins remain unchanged, but as the *gram* (the metric unit) is now a legal unit of weight (act July 28, 1866), the weight of the different coins in the schedule annexed has been given in *grams* as well as in troy grains. The propriety of substituting the metric system authorized by law for the present mixed system of ounces and decimals for weighing bullion; of pennyweights and grains in weighing and adjusting coins; and of grams and milligrams in a process of assaying at the mint, has been suggested. This can be done with little inconvenience, and is recommended.

Should the metric system of weights be adopted, as suggested, exclusively for use in the mint, the following deviation in metric weight may be substituted for those in troy weight above given:

In weighing single pieces, for each double eagle, thirty-three and one-third milligrams; for the eagle, twenty-five milligrams; for the half eagle, fifteen milligrams; for the three-dollar piece, twelve milligrams; for the quarter eagle, ten milligrams; and for the gold dollar piece, five milligrams; for the *silver* half-dollar and quarter-dollar pieces, sixty-two and one-half milligrams; and for the dime, fifty milligrams.

In weighing pieces in bulk the following metric deviations may be substituted: In deliveries of five thousand dollars' worth of double eagles, eagles, half eagles, and quarter eagles, three hundred milligrams (about eighteen cents); in deliveries of

[1] Assuming the value of gold to be fifteen and one-half times that of silver, the French five-franc piece is worth about ninety-six and one-half cents (96.4784), the standard Mexican dollar $1 04.90, our silver dollar piece $1 03.12, and two of our half-dollar pieces 96 cents.

three thousand dollars' worth of three-dollar pieces, one hundred and eighty milligrams; and of one-thousand-dollar pieces, sixty milligrams; in deliveries of one thousand dollars' worth of half-dollar and quarter-dollar pieces, six hundred and twenty-five milligrams; and of one hundred dollars' worth of dimes, six hundred and twenty-five milligrams.

Our silver coinage, by an increase of about one-half of one per cent in weight, would be rendered metric, so that two dimes would weigh five grams, thereby being equal in weight to the nickel five-cent piece; and ten of these dimes would be the exact equivalent in weight and fineness of the standard legal tender silver five-franc piece of France, which is of the value of $0 96.48. The difference of value between the gold and silver coins would still be sufficient to prevent the exportation of the latter, judging from their relative value for the past sixty years,[1] and if any change is to be made in the weight of the silver coins this is suggested.

INTERNATIONAL COINAGE.

The United States would undoubtedly agree to any system of international coinage having simple relations to some acknowledged unit of weight, first agreed upon by England and France, in order to simplify the present absurd system of calculating exchange; but if it is proposed to lead the way in such a system, then the metric system presents advantages over any other proposed. It is probable that the larger portion of our gold coins (to-day) in circulation would, if weighed together, fall short of their original weight (arising chiefly from abrasion) more than three dollars on the thousand dollars, which is the difference between the values of the metric coins proposed and of the existing coins, so that if the existing coinage of the country were to be exchanged weight for weight for the proposed metric coins there would probably be very little difference.

ACKNOWLEDGMENTS.

In the preparation of the bill I have been greatly indebted to Robert Patterson, Franklin Peale, and J. Ross Snowden, of Philadelphia; L. A. Garnett and John Hewston, jr., of San Francisco; E. B. Elliott, of the Treasury Department, and to the officers of the different mints and assay offices for notes and suggestions, and particularly to Hon. H. R. Linderman, late Director of the Mint, who has been associated with me by your direction in the final revision as now presented.

Since the year 1837 no revision of the various mint laws has been attempted, and the necessity and importance of such a work have long been experienced. The proposed bill has been prepared with great care, and if it shall receive the indorsement of Congress and become a law, it is confidently believed that it will add much to the efficient and economical administration of this very important branch of the government service.

APPENDIX.

Tables showing the weight and fineness of all the coins of the United States, both in troy and metric weights, are appended; also exhibiting the tolerance now authorized and the tolerance proposed.

A schedule is also inclosed exhibiting the wastage annually at the Mint at Philadelphia from 1857 to 1869.

A copy of the "coinage act, 1870," which has recently passed the English Parliament is also given.

Respectfully submitted.

JNO. JAY KNOX,
Deputy Comptroller of the Currency.

Hon. GEORGE S. BOUTWELL,
Secretary of the Treasury.

The rough draft of the bill as originally prepared is hereto appended. This is the form of the bill to which Mr. Knox alludes in the beginning of the foregoing letter, and the one in which it was transmitted to the different mints and assay offices, to the First Comptroller, the Treasurer, Solicitor, First Auditor, and to some thirty

[1] From the commencement of the seventeenth century the value of gold in comparison with silver gradually advanced, reaching in the middle of that century fourteen and one-half times that of silver; during the twenty years previous to 1809 gold averaged 14.9, nearly fifteen times the value of silver; since which time it gradually advanced, averaging, during the thirty years previous to 1849, just prior to the discovery of the new gold fields, nearly fifteen and seven-eighths times (15.82) that of silver; in 1859 its relative value was 15.2, since which time it has advanced to 15.6, the point it now holds. (Report of Special Commissioner of Revenue, 1869, Elliott's Tables, page 141.)

other gentlemen versed in metallurgical and numismatic subjects for such criticisms and suggestions as their experience might dictate.

It is followed by the draft of the bill made after these suggestions had been received (Appendix A).

A BILL revising the laws relative to the mints, assay offices, and coinage of the United States.

SECTION 1. *Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That the officers of the Mint of the United States shall be as follows:

A Director of the Mint, who shall have his office in the Treasury Department at Washington; and for the Mint at Philadelphia, the Mint at San Francisco, and the Mint at Carson City, and such other Mints as are now, or may hereafter be, authorized by law, a Superintendent, a Treasurer, an Assayer, a Melter and Refiner, and a Coiner, to be appointed by the President of the United States, by and with the advice and consent of the Senate.

SEC. 2. *And be it further enacted,* That there shall also be appointed by the President of the United States, by and with the advice and consent of the Senate, an Engraver for the Mint at Philadelphia.

SEC. 3. *And be it further enacted,* That the respective duties of the officers of the Mint shall be as follows:

First. The Director shall have the general supervision of all Mints and Assay Offices now authorized, or which shall hereafter be authorized by law, and shall make an annual report to the Secretary of the Treasury of the operations of all Mints and Assay Offices of the United States, at the close of each fiscal year; and from time to time such additional reports setting forth the operations and condition of such institutions as such Secretary shall require. He shall employ, from time to time, the necessary clerks to discharge such duties as he shall direct, which clerks shall be appointed by the Secretary of the Treasury in the manner now prescribed by law. He shall also have charge of all other matters, statistical and otherwise, tending to the development of mining industry and the precious metals.

Second. The Superintendent of each Mint shall have the control thereof, the superintendence of the officers and persons employed therein, and the supervision of the business thereof, subject to the direction of the Director. He shall also employ such workmen as he shall from time to time find necessary, and make monthly reports during each and every year, according to the form which may be prescribed by the Director, which report shall exhibit in detail, and under appropriate heads, the deposits of bullion, the amount of gold, silver, and minor coinage, and the amount of unparted, standard, and refined bars issued, and such other statistics and information as may be required by the Director.

Third. The Treasurer (who shall not hereafter act as Assistant Treasurer of United States,) shall receive and safely keep all moneys which shall be for the use and support of the Mint. He shall receive all bullion brought to the Mint for assay or coinage; shall be the keeper of all bullion or coin in the Mint, except while the same is legally placed in the hands of other officers, and shall, on warrants from the Superintendent, deliver all coins struck at the Mint to the persons to whom they shall be legally payable. From the report of the Assayer and the weight of the bullion, he shall estimate the whole value of each deposit, and also the amount of the charges or deductions, if any; of all which he shall give a detailed memorandum to the depositor; and he shall also give at the same time, under his hand, a certificate of the net amount of the deposit, to be paid in coins or bars of the same species of bullion as that deposited. He shall keep regular and faithful accounts of his transactions with the other officers of the Mint and the depositors, and in all cases of transfer of coin or bullion, he shall give and receive vouchers stating the amount and character of such coin or bullion. He shall also appoint the employés in his office, subject to the approval of the Superintendent and the Secretary of the Treasury.

Fourth. The Assayer shall correctly assay all metals and bullion whenever such assays are required in the operations of the Mint; he shall also make assays of coins whenever instructed to do so by the Superintendent. He shall also have authority to assay, at his discretion, such ores as may be presented for that purpose, and a charge covering the expenses of the process shall be collected of the owner.

Fifth. The Melter and Refiner shall execute all the operations which are necessary in order to form ingots of standard silver or gold and alloys for minor coinage suitable for the Coiner, from the metals legally delivered to him for that purpose. He shall keep a careful record of all transactions with the Treasurer, noting the weight and character of the bullion, and shall be responsible for all bullion delivered to him until the same is returned to the Treasurer and the proper vouchers obtained.

Sixth. The Coiner shall execute all the operations which are necessary in order to form coins, conformable in all respects to the law, from the standard silver and gold ingots, and alloys for minor coinage legally delivered to him for this purpose. He

shall be responsible for all bullion delivered to him, until the same is returned to the Treasurer and the proper vouchers obtained.

Seventh. The Engraver shall prepare and engrave, with the legal devices and inscriptions, all the dies used in the coinage of the Mints.

SEC. 4. *And be it further enacted,* That the Superintendent shall appoint with the approval of the Director and of the Secretary of the Treasury, one assistant each to the Assayer, Melter and Refiner, Coiner, (and Engraver at the Mint in Philadelphia,) and clerks for the Superintendent, not exceeding two in number. And it shall be the duty of the assistants to aid their principals in the execution of their respective offices, and of the clerks to perform such duties as shall be prescribed for them by the Superintendent.

SEC. 5. *And be it further enacted,* That whenever any officer of the Mint shall be temporarily absent, on account of sickness, or any other sufficient cause, it shall be lawful for the Superintendent, with the consent of the said officer, to appoint some person attached to the Mint to act in the place of such officer during his absence, which officer shall be responsible for the acts of his representative.

SEC. 6. *And be it further enacted,* That every officer, assistant, and clerk of the Mint shall, before he enters upon the execution of his office, take an oath or affirmation before some judge of the United States, or judge of the superior court, or any court of record of any State, faithfully and diligently to perform the duties thereof. And the Superintendent at each Mint may require such oath or affirmation from any of the employés of the Mint.

SEC. 7. *And be it further enacted,* That the Superintendent, Assayer, the Melter and Refiner, and Coiner of each Mint, before entering upon the execution of their respective offices, shall become bound to the United States, with one or more sureties, to the Secretary of the Treasury, in the sum of fifty thousand dollars, with condition for the faithful and diligent performance of the duties of their offices. Similar bonds may also be required of the assistants and clerks, in such sums as the Superintendent shall determine, with the approbation of the Secretary of the Treasury.

SEC. 8. *And be it further enacted,* That there shall be allowed to officers of the Mint the following salaries, per annum: To the Director $, and necessary travelling expenses in visiting the different Mints and Assay offices; to the Superintendents of the Mints at Philadelphia and San Francisco, $; to the Treasurers, Assayers, Melters and Refiners, Coiners, and Engraver, of those Mints, each, $; to the Superintendent of the Mint at Carson City, and all other Mints now established, or hereafter to be established, a salary of not exceeding $; and to the assayer, Melter and Refiner, and Coiner of such institutions, each, a salary of not exceeding $; to the assistants and clerks of the different Mints and Assay Offices, such annual salaries shall be allowed as the Director may determine, with the approbation of the Secretary. To the workmen shall be allowed such wages, to be determined by the Director, as may be customary and reasonable, according to their respective stations and occupations; and that the salaries provided for in this section shall be payable in monthly instalments.

SEC. 9. *And be it further enacted,* That the standard for both gold and silver coins of the United States shall hereafter be such, that of one thousand parts by weight, nine hundred shall be of pure metal, and one hundred of alloy; and the alloy of the silver coins shall be of copper, and the alloy of the gold coins shall be of copper and silver, provided that the silver does not exceed one-half of the whole alloy.

SEC. 10. *And be it further enacted,* That of the gold coins, the weight of the double eagle shall be five hundred and sixteen grains; that of the eagle two hundred and fifty eight grains; that of the half eagle one hundred and twenty-nine grains; that of the quarter eagle sixty-four and a half grains; that of three dollar pieces seventy-seven and four-tenths grains; that of the one dollar pieces twenty-five and eight-tenths grains; and these coins shall be a legal tender in all payments.

SEC. 11. *And be it further enacted,* That of the silver coins, the weight of the dollar shall be three hundred and eighty-four grains; (now 412½ grains;) the weight of the half dollar piece, or fifty cents, shall be one hundred and ninety-two grains; and that the quarter dollar, dime, and half dime, shall be respectively, one-half, one-fifth, and one-tenth, of the weight of said half dollar. That the silver coin issued in conformity with the above section shall be a legal tender in payment of debts for all sums not exceeding five dollars, except duties on imports.

SEC. 12. *And be it further enacted,* That in adjusting the weights of the gold coins the following deviations shall not be exceeded in any single piece: In the double eagle, the eagle, and half eagle, one-half of a grain; in the three dollar piece, in the quarter eagle, and one dollar piece, one-quarter of a grain: And that in weighing a large number of pieces together, when delivered from the Coiner to the Treasurer, and from the Treasurer to the depositor, the deviation from the standard weight shall not exceed three pennyweights in one thousand double eagles; two pennyweights in one thousand eagles; one and one-half pennyweights in one thousand half eagles; one pennyweight in one thousand three dollar pieces and quarter eagles; and one-half pennyweight in one thousand one dollar pieces.

SEC. 13. *And be it further enacted*, That in adjusting the weight of large numbers of silver coins, when delivered from the Coiner to the Treasurer, and from the Treasurer to the depositor, the deviations from the standard weight shall not exceed the following limits: Four pennyweights in one thousand dollars; three pennyweights in one thousand half dollars; two pennyweights in one thousand quarter dollars; one pennyweight in one thousand dimes, and one pennyweight in one thousand half dimes.

[NOTE.—Convert pennyweights into grains or ounces and thousandths in above sections.]

SEC. 14. *And be it further enacted*, That the Coiner shall, from time to time, as the coins are prepared, deliver them over to the Treasurer, who shall keep a careful record of their kind, number, and weight; and that in receiving the coins it shall be the duty of the Treasurer to ascertain, by the employ of a number of single pieces separately, whether the coins of that delivery are within the legal limits of the standard weight; and if his trials for this purpose shall not prove satisfactory, he shall cause all the coins of this delivery to be weighed separately, and such as are not of legal weight shall be delivered to the Melter and Refiner as standard bullion, to be again formed into ingots and recoined.

SEC. 15. *And be it further enacted*, That at every delivery of coins made by the Coiner to the Treasurer, it shall be the duty of the Treasurer, in the presence of the Assayer, to take indiscriminately a certain number of pieces of each variety for the annual trial of coins, (the number being prescribed by the Superintendent,) which shall be carefully labelled and deposited in a chest appropriated for the purpose, kept under the joint care of the Treasurer and Assayer, and so secured that neither can have access to its contents without the presence of the other. Other pieces may at the same time be taken for such tests as the Director shall prescribe.

SEC. 16. *And be it further enacted*, That the Coiner shall, from time to time, deliver to the Treasurer the clippings and other portions of bullion remaining after the process of coining, and that the Treasurer and Coiner shall keep a careful record of their amount.

SEC. 17. *And be it further enacted*, That in the Treasurer's account with the Coiner, the Coiner shall be debited with the amount in weight of standard metal of all the bullion placed in his hands, and credited with the amount, also by weight, of all the coins, clippings, and other bullion delivered by him to the Treasurer. Once at least in every year, at such time as the Superintendent shall appoint, there shall be an accurate and full settlement of the accounts of the respective operative officers, (the Coiner and Melter and Refiner,) at all the Mints and Assay Offices, at which time the said officers shall deliver up to the Treasurer all the bullion and coin in their possession, respectively, accompanied by statements of all the bullion delivered to them since the last annual settlement, and all the bullion returned by them during the same period, including the amount returned for the purpose of settlement. Counter statements shall be presented by the Treasurer.

SEC. 18. *And be it further enacted*, That, when the bullion and coin has all been surrendered up to the Treasurer, it shall be the duty of the Superintendent to examine the same and ascertain if the amount on hand corresponds with the official statements; and the difference between the amount charged and credited to each officer shall be allowed as necessary wastage, provided the Superintendent shall be satisfied that there has been a bona fide waste of the precious metals, and provided, also, that the amount shall not exceed, in the case of the Melter and Refiner, one thousandth of the whole amount of gold and silver bullion delivered to him since last annual settlement; and in the case of the Coiner, one thousandth of the whole amount of silver, and one-half thousandth of the whole amount of gold, that has been delivered to him by the Treasurer.

SEC. 19. *And be it further enacted*, That it shall also be the duty of the Superintendent to obtain from the Treasurer a correct statement of his balance-sheet at the close of such settlement, and compare the total amount of gold and silver bullion and coin on hand with the total liabilities of the Mint, and present a detailed statement thereof, and of the settlement, to the Director of the Mint. An examination of the ordinary account, and the moneys therein, shall also be made by the Superintendent, and a statement thereof presented to the Director of the Mint.

SEC. 20. *And be it further enacted*, That when the coins which are the equivalent to any deposit of bullion are ready for delivery, they shall be paid over to the depositor, or his order, by the Treasurer, on a warrant from the Director; and the payment shall be made, if demanded, in the order in which the bullion shall have been brought to the Mint; but in cases where there is delay in manipulating a refractory deposit, or for any other unavoidable cause, the payment of subsequent deposits, the value of which is known, shall not be delayed thereby; and that, in the denominations of coin delivered, the Treasurer shall comply with the wishes of the depositor, unless when impracticable or inconvenient to do so, in which case the denominations of coin shall be designated by the Superintendent.

SEC. 21. *And be it further enacted,* That for the purpose of enabling the Mints and Assay Office in New York to make returns to depositors with as little delay as possible, it shall be the duty of the Secretary of the Treasury to keep in the said Mints and Assay Office, when the state of the Treasury will admit thereof, a deposit of such amount of public money, or bullion procured for the purpose, as he shall judge convenient and necessary, out of which those who bring bullion to the said Mints and Assay Office may be paid the value thereof, *in coin or bars,* as soon as practicable after this value has been ascertained; that the bullion so deposited shall become the property of the United States; that no discount or interest shall be charged on money so advanced; and that the Secretary of the Treasury may at any time withdraw the said deposit, or any portion thereof.

SEC. 22. *And be it further enacted,* That to secure a due conformity in the gold and silver coins to their respective standards and weights, an annual trial shall be made of the pieces reserved for this purpose at the Mint, before the judge of the district court of the United States for the eastern district of Pennsylvania, and such other persons as the President shall from time to time designate for that purpose, who shall meet as commissioners, at the Mint in Philadelphia, for the performance of this duty, on the second Monday in February, annually, and may continue their meetings by adjournment, if necessary; and if a majority of the commissioners shall fail to attend at any time appointed for their meeting, then the Director of the Mint shall call a meeting of the commissioners at such other time as he may deem convenient; and that before these commissioners, or a majority of them, and in the presence of the officers of the Mint, such examination shall be made of the reserved pieces as shall be judged sufficient; and if it shall appear that these pieces do not differ from the standard fineness and weight by a greater quantity than is allowed by law, the trial shall be considered and reported as satisfactory; but if any greater deviation from the legal standard or weight shall appear, this fact shall be certified to the President of the United States, and if, on a view of the circumstances of the case, he shall so decide, the officer or officers implicated in the error shall be thenceforward disqualified from holding their respective offices.

SEC. 23. *And be it further enacted,* That national and other medals may be prepared at the Mint at Philadelphia, under such regulations as the Superintendent, with the approval of the Director, may prescribe: *Provided,* That such work does not interfere with the regular coinage operations of said Mint.

SEC. 24. *And be it further enacted,* That the moneys arising from all charges and deductions on and from gold and silver bullion, and the manufacture of medals, and from all other sources, except as hereinafter provided, shall from time to time be paid and covered into the Treasury of the United States on the warrant of the Superintendent, and such transfer shall be reported to the Director of the Mint.

SEC. 25. *And be it further enacted,* That it shall be lawful, at the discretion of the Director of the mint, to re-coin, at the expense of the United States, any of the gold coins herein authorized, whenever the loss, by abrasion or other causes shall have reduced them one grain below the deviation allowed by law.

SEC. 26. *And be it further enacted,* That the working dies at each Mint shall, at the end of such Calendar year, be defaced and destroyed by the Coiner in the presence of the Superintendent and Assayer.

SEC. 27. *And be it further enacted,* That, for the purpose of securing a due conformity in weight of the coins of the United States to the provisions of this act, the brass Troy pound weight procured by the Minister of the United States at London, in the year one thousand eight hundred and twenty-seven, for the use of the Mint, and now in the custody of the Mint at Philadelphia, shall be the standard Troy pound of the Mint of the United States, conformably to which the coinage thereof shall be regulated.

SEC. 28. *And be it further enacted,* That it shall be the duty of the Director of the Mint to procure for each Mint and Assay Office, and safely to keep thereat, a series of standard weights corresponding to the aforesaid Troy pound, consisting of an one-pound weight and the requisite subdivisions and multiples thereof, from the hundredth part of a grain to twenty-five pounds; and that the Troy weights ordinarily employed in the transactions of such Mint and Assay Offices shall be regulated according to the above standards at least once in every year; under the inspection of the Superintendent and Assayer, and the accuracy of those used at the Mint at Philadelphia shall be tested annually, in the presence of the Assay Commissioners, on the day of the annual assay.

SEC. 29. *And be it further enacted,* That in order to procure bullion for the requisite coinage of the sub-divisions of the dollar authorized by this act, the Treasurers of the Mints and of the Assay Office, New York, shall, with the approval of the Director, purchase such bullion with the bullion fund. They shall charge themselves, respectively, with the gain arising from the coinage of such bullion into coin of a nominal value exceeding the intrinsic value thereof, and shall be credited with the difference between such intrinsic value and the price paid for said bullion, and with the

expense of distributing said coins, as hereinafter provided. The balances to their credits, respectively, and the profits arising from the manufacture of the minor coinage, shall be, from time to time, on the warrant of the Superintendent, covered into the Treasury, to the credit of a fund entitled "redemption fund for minor coinage."

SEC. 30. *And be it further enacted,* That such coins shall be paid out at the Mints and Assay Office in exchange for gold coins at par, in sums not less than one hundred dollars; and it shall be lawful, also, to transmit parcels of the same, from time to time, to the Assistant Treasurers, depositaries, and other officers of the United States, under general regulations proposed by the Director of the Mint, and approved by the Secretary of the Treasury: *Provided, however,* That the amount coined into quarter dollars, dimes, and half dimes, shall be regulated by the Secretary of the Treasury.

SEC. 31. *And be it further enacted,* That no deposits for coinage into the half dollar, quarter dollar, dime, and half dime, shall hereafter be received, other than those made by the Treasurer of the Mint, as herein authorized, and upon account of the United States.

SEC. 32. *And be it further enacted,* That, at the option of the depositor, gold or silver may be cast into bars or ingots, of either pure metal or of standard fineness, as the owner may prefer, with a stamp upon the same, designating its weight and fineness; but no piece of either gold or silver shall be cast into bars or ingots of a less weight than ten ounces, except pieces of one ounce, of two ounces, of three ounces, and of five ounces, all of which pieces of less weight than ten ounces shall be of the standard fineness, with their weight and fineness stamped upon them.

SEC. 33. *And be it further enacted,* That upon the coins struck at the Mint there shall be the following devices and legends: Upon one side of each of said coins there shall be an impression emblematic of liberty, with an inscription of the word LIBERTY, and the year of the coinage; and upon the reverse of each of the gold and silver coins there shall be the figure or representation of an eagle, with the inscriptions UNITED STATES OF AMERICA and E PLURIBUS UNUM, and a designation of the value of the coin; but on the reverse of the dime and half dime, cent and half cent, the figure of the eagle shall be omitted; and the Director of the Mint, with the approval of the Secretary of the Treasury, shall cause the motto, "In God we Trust," to be placed upon such coins as shall admit of such legend.

[NOTE.—Shall ½ per cent. coinage charge be authorized?]

SEC. 34. *And be it further enacted,* That the only charge by the Mints and Assay Offices to the depositor shall be as follows: For refining, when the bullion is below standard; for toughening, when metals are contained in it which render it unfit for coinage; for copper used for alloy, when the bullion is above standard; for silver introduced into the alloy of gold; for separating the gold and silver, when these metals exist together in the bullion; for casting bullion into unparted bars. And the rate of these charges shall be fixed, from time to time, by the Director, with the concurrence of the Secretary of the Treasury, so as to equal but not to exceed, in their judgment, the actual expense to the Mint of the materials and labor employed in each of the cases aforementioned.

SEC. 35. There shall also be coined at the Mint at Philadelphia the following pieces, to be composed of three-fourths copper and one-fourth nickel, or as near to that proportion as may be, viz: a piece of one cent, to weigh one and one-half grams, or twenty-three and fifteen-hundredths grains; a piece of three cents, to weigh three grams; and a piece of five cents, to weigh five grams, with such devices as may be fixed by the Director of the Mint, with the approval of the Secretary of the Treasury; and the present coinage of one, three, and five cent pieces, whether of bronze, copper-nickel, or silver, shall thereupon cease.

SEC. 36. *And be it further enacted,* That, in adjusting the weight of the copper-nickel coins provided by this act, there shall be no greater deviation allowed than three grains for the cent piece, and four grains for the other pieces. And in manufacturing the coins and accounting for the same, and for materials used, the same duties and responsibilities shall devolve upon the respective officers as is provided in this act in relation to the gold and silver coinage.

SEC. 37. *And be it further enacted,* That any of the copper-nickel coins provided for by this act shall be a legal tender to any amount less than one dollar in any one payment, (except duties on imports,) and no more.

SEC. 38. *And be it further enacted,* That the material for the copper-nickel coins provided for by this act shall be procured and the coins distributed and the accounts thereof kept in the same manner as is provided in this act for the purchase of silver bullion and the distribution of silver coins of less denomination than one dollar.

SEC. 39. The copper-nickel coins authorized by this act shall be exchangeable at par at the Mint in Philadelphia for every other coin of copper, bronze, or copper-nickel (except the three and five cent pieces) heretofore authorized by law; and it shall be lawful for the Treasurer and the several Assistant Treasurers and Depositaries of the United States to redeem, in national currency, under such rules and regulations as may be prescribed by the Secretary of the Treasury, the coin herein authorized to be issued, when presented in sums of not less than fifty ($50) dollars.

SEC. 40. *And be it further enacted*, That if any person or persons shall falsely make, forge, or counterfeit, or cause or procure to be falsely made, forged, or counterfeited, or willingly aid or assist in falsely making, forging, or counterfeiting, any coin in resemblance or similitude of the gold or silver coin which has been, or hereafter may be coined, at the Mints of the United States; or in resemblance or similitude of any foreign gold or silver coin which by law is, or hereafter may be, made current in the United States; or shall pass, utter, publish, or sell, or attempt to pass, utter, publish, or sell, or bring into the United States, from any foreign place, with intent to pass, utter, publish, or sell, as true, any such false, forged, or counterfeited coin, knowing the same to be false, forged, or counterfeited, with intent to defraud any body, politic or corporate, or any other person or persons whatsoever; every person, so offending, shall be deemed guilty of felony, and shall, on conviction thereof, be punished by fine, not exceeding five thousand dollars, and by imprisonment and confinement at hard labor, not exceeding ten years, according to the aggravation of the offence.

SEC. 41. *And be it further enacted*, That if any person or persons shall falsely make, forge, or counterfeit, or cause or procure to be falsely made, forged, or counterfeited, or willingly aid or assist in falsely making, forging, or counterfeiting, any coin in the resemblance or similitude of any of the minor coinage which has been, or hereafter may be, coined at the Mints of the United States; or shall pass, utter, publish, or sell, or bring into the United States from any foreign place, with intent to pass, utter, publish, or sell, as true, any such false, forged, or counterfeited coin, with intent to defraud any body, politic or corporate, or any person or persons whatsoever; every person so offending shall be deemed guilty of felony, and shall, on conviction thereof, be punished by fine, not exceeding one thousand dollars, and by imprisonment and confinement to hard labor not exceeding three years.

SEC. 42. *And be it further enacted*, That if any person shall fraudulently and for gain's sake, by any art, way, or means whatsoever, impair, diminish, falsify, scale, or lighten the gold or silver coins which have been, or which shall hereafter be, coined at the Mints of the United States, or any foreign gold or silver coins, which are by law made current, or are in actual use and circulation as money within the United States; every person so offending shall be deemed guilty of a high misdemeanor, and shall be imprisoned not exceeding two years, and fined not exceeding two thousand dollars.

SEC. 43. *And be it further enacted*, That if any of the gold or silver coins which shall be struck or coined at the Mint of the United States, shall be debased, or made worse as to the proportion of fine gold or fine silver therein contained; or shall be of less weight or value than the same ought to be, pursuant to the several acts relative thereto, through the default or connivance of any of the officers or persons who shall be employed at the said Mint, for the purpose of profit or gain, or otherwise, with a fraudulent intent; and if any of the said officers or persons shall embezzle any of the metals which shall at any time be committed to their charge for the purpose of being coined, or any of the coins which shall be struck or coined at the said Mints, every such officer or person who shall commit any or either of the said offences shall be deemed guilty of felony, and shall be sentenced to imprisonment and hard labor for a term not less than one year nor more than ten years, and shall be fined in a sum not exceeding ten thousand dollars.

SEC. 44. *And be it further enacted*, That the officers of the United States Assay Office at New York shall be a Superintendent, who shall act as Treasurer, an Assayer, and a Melter and Refiner, who shall be appointed by the President, by and with the advice and consent of the Senate. An assistant to the Superintendent, the Assayer, and the Melter and Refiner, shall be appointed by the Superintendent, with the approval of the Secretary of the Treasury, and the Superintendent may appoint such clerks as may be necessary, subject to the approval of the Director, and employ such workmen as shall be necessary for the conduct of such office, and the business pertaining thereto, at such wages as is customary and reasonable, according to their respective stations and occupations.

SEC. 45. *And be it further enacted*, The Superintendent, who shall act as Treasurer, shall be allowed a salary of $, and shall become bound to the United States with one or more sureties for the sum of $. The Assayer and the Melter and Refiner, shall be allowed a salary of $, and shall become bound to the United States in one or more sureties, as follows: The Assayer for twenty thousand dollars; and the Melter and Refiner for fifty thousand dollars; and the other officers, assistants, and clerks of the office, shall be subject to the same duties and responsibilities, and shall take the same oath and give the same surety, subject to the approval of the Secretary, as is required of the officers, assistants, and clerks of the Mints provided for in this act.

SEC. 46. *And be it further enacted*, That the owner or owners of any gold or silver bullion, in dust or otherwise, or of any foreign coin, shall be entitled to deposit the same in the said office, and the Superintendent thereof shall give a receipt, stating

the weight and description thereof, in the manner and under the regulations that are or may be provided in like cases of deposits at the Mint at Philadelphia with the Treasurer thereof. And such bullion shall, without delay, be melted, parted, refined, and assayed, and the net value thereof, and of all foreign coins deposited in said office, shall be ascertained, and the Treasurer shall thereupon forthwith issue his certificate of the net value thereof, payable in coins of the same metal as that deposited, either at the office of the Assistant Treasurer of the United States at New York, or at the Mint of the United States, at the option of the depositor, to be expressed in the certificate, which certificate shall be receivable at any time within sixty days from the date thereof, in payment of all debts due to the United States at the port of New York, for the full sum therein certified. All gold or silver bullion and foreign coin deposited, melted, parted, refined, or assayed, as aforesaid, shall, at the option of the depositor, be cast in the said office into bars, ingots, or disks, either of pure metal or of standard fineness, (as the owner may prefer,) with a stamp thereon of such form and device as shall be prescribed by the Secretary of the Treasury, accurately designating its weight and fineness: *Provided*, That no ingot, bar, or disk shall be cast of less weight than five ounces, unless the same be of standard fineness, and of either one, two, or three ounces in weight. And all gold or silver bullion, and foreign coin, intended by the depositor to be converted into the coins of the United States, shall, as soon as assayed and its net value certified as above provided, be transferred to the Mint of the United States, under such directions as shall be made by the Secretary of the Treasury, and at the expense of the contingent fund of the Mint, and shall there be coined. And the Secretary of the Treasury is hereby authorized to make the necessary regulations for the adjustment of the accounts between the respective officers, upon the transfer of any bullion or coin between the Assay Office, the Mint, and Assistant Treasurer in New York.

SEC. 47. *And be it further enacted*, That the operations of melting, parting, refining, and assaying in the said office, shall be under the general directions of the Director of the Mint, in subordination to the Secretary of the Treasury; and it shall be the duty of the said Director to prescribe such regulations and to order such tests as shall be requisite to insure faithfulness, accuracy, and uniformity in the operations of the said office.

SEC. 48. *And be it further enacted*, That the laws of the United States for the government of the Mints and officers in relation to the receipt, payment, custody of deposits, and settlement of accounts, the duties and responsibilities of officers and others employed therein, the oath to be taken, and the bond and sureties to be given by them, (as far as the same may be applicable,) shall extend to the Assay Office hereby established, and to its officers, assistants, clerks, workmen, and others employed therein.

SEC. 49. *And be it further enacted*, The business of the branch Mint at Denver, which shall hereafter be conducted as an Assay Office, the Assay Office at Boise City, Idaho, and all other Assay Offices now established, or hereafter to be established, shall be confined to the receipt of gold and silver bullion, melting and refining by fluxes, assay, and return to depositors of the same, in bars, with the weight, fineness, and value stamped thereon.

SEC. 50. *And be it further enacted*, The officers of such Assay Offices, when their services are necessary, shall consist of an Assayer, who shall have charge thereof, and a Melter, to be appointed by the President, by and with the advice and consent of the Senate; and the Assayer may employ two clerks, and as many workmen and laborers, under the direction of the Secretary of the Treasury, not exceeding six in number, as may be required. The salaries of said officers and clerks shall not exceed the following: To the Assayer, the sum of three thousand dollars; to the Melter, the sum of two thousand five hundred dollars; to the clerks, eighteen hundred dollars each; and the subordinate workmen and laborers shall receive such wages as are customary, according to their respective stations and occupations.

SEC. 51. *And be it further enacted*, That the officers and clerks to be appointed at such Assay Offices, before entering upon the execution of their offices, shall take an oath or affirmation before some judge of the United States, or of the Supreme Court of said Territory, as prescribed by the act of July twenty, eighteen hundred and sixty-two, and each become bound to the United States of America, with one or more sureties, to the satisfaction of the Director of the Mint, or of one of the Judges of the Supreme Court, the State or Territory, in which the same may be located, and of the Secretary of the Treasury, with the condition of the faithful performance of the duties of their offices.

SEC. 52. *And be it further enacted*, That the general direction of the business of said Assay Offices of the United States shall be under the control and regulation of the Director of the Mint, subject to the approbation of the Secretary of the Treasury; and for that purpose, it shall be the duty of the said Director to prescribe such regulations and to require such returns periodically and occasionally, and to establish such charges for melting, assaying, and stamping bullion, as shall appear to him

to be necessary for the purpose of carrying into effect the intention of this act in establishing such Assay Offices.

SEC. 53. *And be it further enacted,* That all laws and parts of laws now in force for the regulation of the Mints of the United States, and for the government of the officers and persons employed therein, and for the punishment of all offences connected with the Mint or coinage of the United States, shall be, and they are hereby, declared to be in full force in relation to the Assay Offices by this act established, as far as the same may be applicable thereto.

SEC. 54. *And be it further enacted,* That the officers and employés of the Mints and Assay Offices now appointed shall continue to hold their respective offices as heretofore provided by law, with the exception of the Treasurer of the Mint at Philadelphia and San Francisco, who, from and after the passage of this act shall be authorized to act as Assistant Treasurers of the United States, but not as Treasurer of the Mint.

SEC. 55. *And be it further enacted,* That all acts or parts of acts heretofore passed, relating to the Mints, Assay Offices, and coinage of the United States, which are inconsistent with the provisions of this act, be, and the same are hereby, repealed.

APPENDICES.

APPENDIX A.—PROPOSED BILL.

A BILL revising the laws relative to the mints, assay offices, and coinage of the United States.

SECTION 1. *Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That the Mint of the United States is hereby established as a bureau of the Treasury Department, embracing in its organization and under its control all mints for the manufacture of coin, or assay offices for the stamping of bars which are now or which may be hereafter authorized by law. The chief officer of the said bureau shall be denominated the Director of the Mint of the United States, and shall be under the general direction of the Secretary of the Treasury. He shall be appointed by the President on the recommendation of the Secretary of the Treasury, by and with the advice and consent of the Senate, and shall hold his office for the term of five years, unless sooner removed by the President, upon reasons to be communicated by him to the Senate.

SEC. 2. *And be it further enacted,* That the Director shall have the general supervision of all mints and assay offices, and shall make an annual report to the Secretary of the Treasury of their operations, at the close of each fiscal year; and from time to time such additional reports setting forth the operations and condition of such institutions as the Secretary shall require. He shall lay before the Secretary the annual estimates for their support. He shall appoint the necessary clerks to discharge such duties as he shall direct, whose appointment and rate of compensation shall first be approved by the Secretary of the Treasury. He shall also have charge of all other matters, statistical and otherwise, tending to the development of the mining industry of the precious metals.

SEC. 3. *And be it further enacted,* That the officers of the mints established for the manufacture of coin shall be a superintendent, an assayer, a melter and refiner, and a coiner, and for the Mint at Philadelphia an engraver, all to be appointed by the President of the United States by and with the advice and consent of the Senate.

SEC. 4. *And be it further enacted,* That the superintendent of each mint shall have the control thereof, the superintendence of the officers and persons employed therein, and the supervision of the business thereof, subject to the direction of the Director. He shall make to the Director reports at such times and according to such forms as he may prescribe, which shall exhibit in detail, and under appropriate heads, the deposits of bullion, the amount of gold, silver, and minor coinage, and the amount of unparted, standard, and refined bars issued, and such other statistics and information as may be required by the Director.

The superintendent shall also receive and safely keep, until legally withdrawn, all moneys or bullion which shall be for the use or support of the mint; he shall receive all bullion brought to the mint for assay or coinage; shall be the keeper of all bullion or coin in the mint, except while the same is legally placed in the hands of other officers, and shall deliver all coins struck at the mint to the persons to whom they shall be legally payable. From the report of the assayer and the weight of the bullion he shall compute the whole value of each deposit, and also the amount of the charges or deductions, if any; of all of which he shall give a detailed memorandum to the depositor; and he shall also give at the same time, under his hand, a certificate of the net amount of the deposit, to be paid in coins or bars of the same

species of bullion as that deposited, the correctness of which certificate shall be verified by the assayer, who shall countersign the same. He shall keep and render quarter-yearly to the Director, for the purpose of adjustment, according to such forms as may be prescribed by the Secretary of the Treasury, regular and faithful accounts of his transactions with the other officers of the mint and the depositors, and in all cases of transfer of coin or bullion he shall give and receive vouchers stating the amount and character of such coin or bullion. He shall also render to the Director a monthly statement of the ordinary expenses of the mint or assay office under his charge; he shall also appoint all assistants, clerks, (one of whom shall be designated chief clerk,) and workmen employed under his superintendence, provided that no person shall be appointed to employment in the offices of the assayer, melter and refiner, coiner, or engraver, except on the recommendation and nomination in writing of these officers respectively. The superintendent shall forthwith report to the Director the names of all persons appointed by him, the duties to be performed, the rate of compensation, the appropriation from which compensation is to be made, and the grounds of the appointment. If thereupon the Director shall disapprove of the same the appointment shall be vacated.

SEC. 5. *And be it further enacted,* That the assayer shall correctly assay all metals and bullion whenever such assays are required in the operations of the mint; he shall also make assays of coins when instructed to do so by the superintendent.

SEC. 6. *And be it further enacted,* That the melter and refiner shall execute all the operations which are necessary in order to form ingots of standard silver or gold and alloys for minor coinage suitable for the coiner, from the metals legally delivered to him for that purpose. He shall also execute all the operations which are necessary in order to form standard bars or disks, conformable in all respects to the law, from the gold and silver bullion delivered to him for that purpose. He shall keep a careful record of all transactions with the superintendent, noting the weight and character of the bullion, and shall be responsible for all bullion delivered to him until the same is returned to the superintendent, and the proper vouchers obtained.

SEC. 7. *And be it further enacted,* That the coiner shall execute all the operations which are necessary in order to form coins, conformable in all respects to the law, from the standard gold and silver ingots and alloys for minor coinage legally delivered to him for this purpose. He shall be responsible for all bullion delivered to him, until the same is returned to the superintendent and the proper vouchers obtained.

SEC. 8. *And be it further enacted,* That the engraver shall prepare from the original dies already authorized all the working dies required for use in the coinage of the several mints; and when new coins or devices are authorized, shall, if required by the Director, prepare the devices, models, molds, and matrices, or original dies for the same; but the Director shall nevertheless have power, with the approval of the Secretary of the Treasury, to engage temporarily for this purpose the services of one or more artists distinguished in their respective departments, who shall be paid for such service from the contingent appropriation for the Mint at Philadelphia.

SEC. 9. *And be it further enacted,* That when any officer of a mint or assay office shall be temporarily absent on account of sickness, or any other sufficient cause, it shall be lawful for the superintendent, with the consent of the said officer, to appoint some person attached to the mint to act in the place of such officer during his absence, which officer shall be responsible for the acts of his representative. In case of the temporary absence of the superintendent, the chief clerk shall act in his place, but all such appointments shall be forthwith reported to the Director for his approval, and in all cases whatsoever the principal shall be responsible for the acts of his representative. In case of the temporary absence of the Director, the Secretary of the Treasury shall designate some one to act in his place.

SEC. 10. *And be it further enacted,* That every officer, assistant, and clerk of the mint shall, before he enters upon the execution of his office, take an oath or affirmation before some judge of the United States, or judge of the superior court, or any court of record of any State, faithfully and diligently to perform the duties thereof, in addition to other official oaths prescribed by law; which oaths, duly certified, shall be transmitted to the Secretary of the Treasury; and the superintendent at each mint may require such oath or affirmation from any of the employés of the mint.

SEC. 11. *And be it further enacted,* That the superintendent, assayer, the melter and refiner, and coiner of each mint, before entering upon the execution of their respective offices, shall become bound to the United States, with one or more sureties approved, by the Secretary of the Treasury, in the sum of not less than ten nor more than fifty thousand dollars with condition for the faithful and diligent performance of the duties of their offices: *Provided,* The Secretary of the Treasury may at discretion increase the bonds of the superintendent. Similar bonds may be required of the assistants and clerks, in such sums as the superintendent shall determine, with the approbation of the Director, provided that the same shall not be construed so as to relieve the superintendent or other officers from liability to the United States, for acts, omissions, and negligence of their subordinates or employés.

SEC. 12. *And be it further enacted*, That there shall be allowed to officers of the mint the following salaries, per annum: To the Director, $5,500, and necessary traveling expenses in visiting the different mints and assay offices; to the superintendents of the mints at Philadelphia and San Francisco, $5,000; to the assayers, melters, and refiners, and coiners of those mints, each, $3,500; to the engraver of the Mint at Philadelphia, $3,000; to the superintendent of the mint at Carson City, and all other mints now established, or hereafter to be established, a salary of not exceeding $3,500; and to the assayer, melter, and refiner, and coiner of such institutions, each a salary of not exceeding $3,000; to the assistants and clerks such annual salaries shall be allowed as the superintendent may determine, with the approbation of the Director. To the workmen shall be allowed such wages, to be determined by the superintendent, as may be customary and reasonable, according to their respective stations and occupations; and the salaries provided for in this section, and the wages of the workmen permanently engaged shall be payable in monthly installments.

SEC. 13. *And be it further enacted*, That the standard for both gold and silver coins of the United States shall hereafter be such, that of one thousand parts by weight, nine hundred shall be of pure metal, and one hundred of alloy; and the alloy of the silver coins shall be of copper, and the alloy of gold coins shall be of copper and silver, provided that the silver does not exceed one-tenth of the whole alloy.

SEC. 14. *And be it further enacted*, That of the gold coins, the weight of the double-eagle or twenty-dollar piece shall be five hundred and sixteen grains; that of the eagle or ten-dollar piece, two hundred and fifty-eight grains; that of half-eagle or five-dollar piece, one hundred and twenty-nine grains; that of the quarter-eagle or piece of two and one-half dollars, sixty-four and one-half grains; that of the three-dollar piece, seventy-seven and four-tenth grains; that of the one-dollar piece, or unit of value, twenty-five and eight-tenth grains; and these coins shall be a legal tender in all payments.

SEC. 15. *And be it further enacted*, That of the silver coins, the weight of the half-dollar, or piece of fifty cents, shall be one hundred and ninety-two grains; and that of the quarter-dollar and dime shall be respectively one-half and one-fifth of the weight of said half-dollar. That the silver coin issued in conformity with the above section shall be a legal tender in any one payment of debts for all sums less than one dollar.

SEC. 16. *And be it further enacted*, That the standard for minor coinage shall be an alloy of copper and nickel, to be composed of three-fourths copper and one-fourth nickel.

SEC. 17. *And be it further enacted*, That of the copper-nickel coinage the weight of the piece of five cents shall be five grams, or seventy-seven and sixteen-hundreths grains troy; that of the three-cent piece, three grams, or forty-six and thirty-hundredths grains; and of the one-cent piece, one and one-half grams, or twenty-three and fifteen-hundredths grains; which coins shall be a legal tender in any one payment to the amount of twenty cents.

SEC. 18. *And be it further enacted*, That no coins, either of gold, silver, or minor coinage, shall hereafter be issued from the mint, other than those of the denominations, standards, and weights herein set forth.

SEC. 19. *And be it further enacted*, That upon the coins of the United States there shall be the following devices and legends: Upon one side of each of the said coins there shall be an impression emblematic of liberty, with an inscription of the word LIBERTY, and the year of the coinage; and upon reverse of each coin there shall be the figure or representation of an eagle, with the inscriptions UNITED STATES OF AMERICA and E PLURIBUS UNUM, and a designation of the value of the coin; but on the reverse of the gold dollar and three dollar piece, the dime, five, three, and one cent pieces, the figure of the eagle shall be omitted; and the Director of the Mint, with the approval of the Secretary of the Treasury, may cause the motto, "In God we Trust," to be placed upon such coins as shall admit of such legends.

SEC. 20. *And be it further enacted*, That, at the option of the owner, gold or silver may be cast into bars or ingots, or formed into disks of either fine metal, or of standard fineness, or unrefined, as he may prefer, with a stamp upon the same, designating the weight and fineness, and with such devices impressed thereon as may be deemed expedient to protect against fraudulent imitations; provided that no such bars, ingots, or disks shall be issued of a less weight than five ounces, and that no valuation shall be stamped upon the same.

SEC. 21. *And be it further enacted*, That any owner of gold and silver bullion may deposit the same at the mint, to be formed into coin or bars for his benefit: *Provided*, That it shall be lawful to refuse any deposit of less value than one hundred dollars, and any bullion so base as to be unsuitable for the operations of the mint: *And provided also*, That when gold and silver are combined, if either of these metals be in such small proportion that it cannot be separated advantageously, no allowance shall be made to the depositor for the value of such metal.

SEC. 22. *And be it further enacted*, That when bullion is brought to the mint for

coinage it shall be weighed by the superintendent in the presence of the depositor, when practicable, and a receipt given, which shall state the description and weight of the bullion: *Provided*, That when the bullion is in such a state as to require melting before its value can be ascertained, the weight after melting shall be considered as the true weight of the bullion deposited.

SEC. 23. *And be it further enacted*, That from every parcel of bullion deposited for coinage, bars, or disks, the superintendent shall deliver to the assayer a sufficient portion for the purpose of being assayed; but all such bullion remaining from the operations of the assay shall be returned to the superintendent by the assayer.

SEC. 24. *And be it further enacted*, That the assayer shall report to the superintendent the quality or standard of the bullion assayed by him; and he shall also communicate to the superintendent such information as will enable him to compute the amount of the charges hereinafter provided for, to be made to the depositor for the expenses of converting the bullion into standard metal fit for coinage.

SEC. 25. *And be it further enacted*, That the only charge on deposits of bullion for coin, bars, or disks, shall be as follows: For refining, when the bullion is below standard; for toughening, when metals are contained in it which render it unfit for coinage; for copper used for alloy, when the bullion is above standard; ([1] for silver introduced into the alloy of gold;) for separating the gold and silver, when these metals exist together in the bullion; for the preparation of bars, or disks; and the rate of these charges shall be fixed, from time to time, by the Director, with the concurrence of the Secretary of the Treasury, so as to equal but not to exceed, in their judgment, the actual average expense to each mint of the material and labor employed in each of the cases aforementioned.

SEC. 26. *And be it further enacted*, That the assayer shall verify all calculations made by the superintendent of the value of deposits, and if satisfied of the correctness thereof, shall countersign the certificate of the same heretofore required to be given by the superintendent to the depositor.

SEC. 27. *And be it further enacted*, That silver bullion, deposited by private holders, shall be paid for in silver bars, or disks, only, and that no deposit for coinage into silver coin shall be received: *Provided, however*, That silver bullion contained in gold deposits, and separated therefrom, may be paid for in silver coin at such valuation as may be from time to time established by the Director.

SEC. 28. *And be it further enacted*, That in order to procure bullion for the silver coinage authorized by this act, the superintendent of each mint shall, with the approval of the Director as to price, terms, and quantity, purchase such bullion with the gold coins in the bullion fund. The gain arising from the coinage of such bullion into coin of a nominal value, exceeding the cost value thereof, shall be credited to a special fund denominated the "silver profit fund." This fund shall be charged with the wastage incurred in the silver coinage, and with the expense of distributing said coins as hereinafter provided; the balance to the credit of this fund shall be from time to time, and at least twice a year, paid into the treasury of the United States.

SEC. 29. *And be it further enacted*, That such coins shall be paid out at the mints only in exchange for gold coins at par, and in sums not less than one hundred dollars, and it shall be lawful, also, to transmit parcels of the same, from time to time, to the assistant treasurers, depositaries, and other officers of the United States, under general regulations proposed by the Director of the Mint and approved by the Secretary of the Treasury: *Provided*, That nothing herein contained shall hinder the payment of silver coins for silver parted from gold as above provided, or for change less than one dollar in settlements for gold deposits.

SEC. 30. *And be it further enacted*, That in order to procure the metal for the minor coinage of copper-nickel authorized by this act, a sum not exceeding one hundred thousand dollars in lawful money of the United States shall be deposited by the Secretary of the Treasury with the superintendent of the Mint at Philadelphia, at which establishment only, until otherwise provided by law, such minor coinage shall be carried on. With this fund the superintendent shall, with the approval of the Director as to price, terms, and quantity, purchase the metals required for such coinage. The gain arising from the coinage of such metals into coin of a nominal value, exceeding the cost thereof, shall be credited to the special fund denominated the "minor coinage profit fund." This fund shall be charged with the wastage incurred in such coinage and with the expenses of distributing said coins, as hereinafter provided. The balance to the credit of this fund, and any balance of profits accrued from minor coinage under former acts, shall be from time to time, and at least twice a year, paid into the treasury of the United States.

SEC. 31. *And be it further enacted*, That it shall be the duty of the superintendent

[1] The words, "for silver introduced into the alloy of gold;" appear in this "Proposed Bill" as shown by Senate Mis. Doc. No. 132, but are eliminated in the "Proposed Bill" as shown in House Mis. Doc. No. 307.—(41st Cong., 2d session.)

to deliver the copper-nickel coins in exchange for their legal equivalent in other money to any person who shall apply for them: *Provided*, That the sum asked for shall not be less than a certain amount to be previously determined by him, and that it be not so great as in his judgment to interfere with the capacity of the mint to supply other applicants.

SEC. 32. *And be it further enacted*, That the copper-nickel coins may, at the discretion of the superintendent, be delivered in any of the principal cities and towns of the United States, at the cost of the mint for transportation.

SEC. 33. *And be it further enacted*, That the copper-nickel coins authorized by this act shall be exchangeable at par at the Mint in Philadelphia for every other coin of copper, bronze, or copper-nickel (except the three and five cent copper-nickel pieces) heretofore authorized by law; and it shall be lawful for the Treasurer and the several assistant treasurers and depositaries of the United States to redeem in national currency, under such rules and regulations as may be prescribed by the Secretary of the Treasury, the copper-nickel coin herein authorized to be issued, when presented in sums of not less than fifty dollars, ($50;) and whenever under this authority these coins are presented for redemption in such quantity as to show the amount outstanding to be redundant, the Secretary of the Treasury is authorized and required to direct that such minor coinage shall cease until otherwise ordered by him.

SEC. 34. *And be it further enacted*, That parcels of bullion shall be from time to time transferred by the superintendent to the melter and refiner; that a careful record of these transfers, noting the weight and character of the bullion, shall be kept, and that vouchers shall be taken for the delivery of the same, duly receipted by the melter and refiner, and that the bullion thus placed in the hands of the melter and refiner shall be subjected to the several processes which may be necessary to form it into ingots of the legal standard and of a quality suitable for coinage.

SEC. 35. *And be it further enacted*, That the ingots thus prepared shall be assayed by the assayer, and if they prove to be within the limit allowed for deviation from the standard, the assayer shall certify the fact to the superintendent, who shall thereupon receive the same and transfer them to the coiner.

SEC. 36. *And be it further enacted*, That no ingots shall be used for coinage which differ from the legal standard more than the following proportions, namely: In gold ingots, one-thousandth; in silver ingots, two and one-half thousandths; in copper-nickel ingots, twenty-five thousandths, in the proportion of nickel.

SEC. 37. *And be it further enacted*, That the melter and refiner shall prepare all bars, ingots, or disks required for the payment of deposits, but the fineness thereof shall be ascertained and stamped thereon by the assayer.

SEC. 38. *And be it further enacted*, That in adjusting the weights of the gold coins the following deviations shall not be exceeded in any single piece: In the double-eagle, one-half of a grain; in the eagle, three-eighths of a grain; in the half-eagle, one-fourth of a grain; in the three-dollar piece, and quarter-eagle, one-sixth of a grain; and in the one dollar piece, one-twelfth of a grain. And that in weighing a large number of pieces together when delivered from the coiner to the superintendent, and from the superintendent to the depositor, the deviation from the standard weight shall not exceed one-hundredth of an ounce in five thousand dollars' worth of double-eagles, eagles, half-eagles, or quarter-eagles; seven-and-a-half-thousandths of an ounce in three thousand dollars' worth of three-dollar pieces; and five-thousandths of an ounce in one thousand one-dollar pieces.

SEC. 39. *And be it further enacted*, That in adjusting the weight of silver coins the following deviations shall not be exceeded in any single piece: In the half and quarter dollar, one grain; and in the dime, half a grain; and that in weighing large numbers of pieces together when delivered from the coiner to the superintendent, and from the superintendent to the depositor, the deviations from the standard weight shall not exceed the following limits: Two hundredths of an ounce in one thousand dollars' worth of half-dollars, or quarter-dollars; and one-hundredth of an ounce in one hundred dollars' worth of dimes.

SEC. 40. *And be it further enacted*, That in adjusting the weight of the copper-nickel coins provided by this act, there shall be no greater deviation allowed than three grains for the five-cent pieces, and two grains for the three and one-cent pieces.

SEC. 41. *And be it further enacted*, That the coiner shall, from time to time, as the coins are prepared, deliver them over to the superintendent, who shall keep a careful record of their kind, number, and weight; and that in receiving the coins it shall be the duty of the superintendent to ascertain, by the trial of a number of single pieces separately, whether the coins of that delivery are within the legal limits of the standard weight; and if his trials for this purpose shall not prove satisfactory, he shall cause all the coins of this delivery to be weighed separately, and such as are not of legal weight shall be defaced and delivered to the melter and refiner as standard bullion, to be again formed into ingots and recoined; or the whole delivery may, if more convenient, be remelted.

SEC. 42. *And be it further enacted*, That at every delivery of coins made by the

coiner to the superintendent, it shall be the duty of the superintendent of each mint, in the presence of the assayer, to take indiscriminately a certain number of pieces of each variety for the annual trial of coins, (the number being prescribed by the Director,) which shall be carefully sealed up, labelled, and deposited in the pyx appropriated for the purpose, kept under the joint care of the superintendent and assayer, and so secured that neither can have access to its contents without the presence of the other; which pieces, except those coined at that institution, shall be transmitted quarterly to the Mint at Philadelphia. Other pieces may at the same time be taken for such tests as the Director shall prescribe.

SEC. 43. *And be it further enacted*, That in the superintendent's account with the coiner, the latter shall be debited with the amount in weight of standard metal of all the bullion placed in his hands, and credited with the amount, also by weight, of all coins, clippings, and other bullion delivered by him to the superintendent. Once at least in every year, at such time as the superintendent shall appoint, there shall be an accurate and full settlement of the accounts of the respective operative officers, (the coiner, and melter and refiner,) at which time the said officers shall deliver up to the superintendent all the bullion and coin in their possession, respectively, accompanied by statements of all the bullion delivered to them since the last annual settlement, and all the bullion returned by them during the same period, including the amount returned for the purpose of settlement. Counter statements shall be presented by the superintendent.

SEC. 44. *And be it further enacted*, That when the bullion and coin has all been surrendered up to the superintendent it shall be his duty to examine the accounts and statements rendered by the operative officers (for the same,) and if the bullion falls short of that delivered, the difference between the amount charged and credited to each officer shall be allowed as necessary wastage, provided the superintendent shall be satisfied there has been a *bona fide* waste of the precious metals, and provided, also, that the amount shall not exceed, in the case of the melter and refiner, one-thousandth of the whole amount of gold and one and one-half thousandths of the silver bullion delivered to him since last annual settlement; and in the case of the coiner, one-thousandth of the whole amount of silver, and one-half thousandth of the whole amount of gold, that has been delivered to him by the superintendent; provided that all copper used in the alloy of gold and silver bullion shall be separately charged to the melter and refiner and accounted for by him.

SEC. 45. *And be it further enacted*, That it shall also be the duty of the superintendent to forward a correct statement of his balance-sheet at the close of such settlement to the Director, who shall compare the total amount of gold and silver bullion and coin on hand with the total liabilities of the mint. A corresponding statement of the ordinary account, and the moneys therein, shall also be made by the superintendent.

SEC. 46. *And be it further enacted*, That when the coins or bars which are the equivalent to any deposit of bullion are ready for delivery, they shall be paid over to the depositor, or his order, by the superintendent; and the payments shall be made, if demanded, in the order in which the bullion shall have been brought to the mint; but in cases where there is delay in manipulating a refractory deposit, or for any other unavoidable cause, the payment of subsequent deposits, the value of which is known, shall not be delayed thereby; and that in the denominations of coins delivered, the superintendent shall comply with the wishes of the depositor, unless when impracticable or inconvenient to do so.

SEC. 47. *And be it further enacted*, That unparted bars may be exchanged at any of the respective coinage mints for fine bars on such terms and conditions as may be prescribed by the Director, with the approval of the Secretary of the Treasury.

SEC. 48. *And be it further enacted*, That for the purpose of enabling the mints and assay office in New York to make returns to depositors with as little delay as possible, it shall be the duty of the Secretary of the Treasury to keep in the said mints and assay office, when the state of the Treasury will admit thereof, such an amount of public money, or bullion procured for the purpose, as he shall judge convenient and necessary, out of which those who bring bullion to the said mints and assay office may be paid the value thereof, in coin or bars as soon as practicable after this value has been ascertained; and on payment thereof being made the bullion so deposited shall become the property of the United States; and that the Secretary of the Treasury may at any time withdraw the bullion fund, or any portion thereof.

SEC. 49. *And be it further enacted*, That to secure a due conformity in the gold and silver coins to their respective standards of fineness and weight, an annual trial shall be made of the pieces reserved at the several mints for this purpose, before the judge of the district court of the United States for the eastern district of Pennsylvania, the assayer of the assay office, New York, and such other persons as the President shall from time to time designate for that purpose, who shall meet as commissioners, at the Mint in Philadelphia, for the performance of this duty, on the second Monday in February, annually, and may continue their meetings by adjournment, if necessary;

and if a majority of the commissioners shall fail to attend at any time appointed for their meeting, then the Director of the Mint shall call a meeting of the commissioners at such other time as he may deem convenient; and that before these commissioners, or a majority of them, and in the presence of the Director of the Mint, such examination shall be made of the reserved pieces as shall be judged sufficient; and if it shall appear that these pieces do not differ from the standard fineness and weight by a greater quantity than is allowed by law, the trial shall be considered and reported as satisfactory; but if any greater deviation from the legal standard or weight shall appear, this fact shall be certified to the President of the United States; and if, on a view of the circumstances of the case, he shall so decide, the officer or officers implicated in the error shall be thenceforward disqualified from holding their respective offices.

SEC. 50. *And be it further enacted*, That for the purpose of securing a due conformity in weight of the coins of the United States to the provisions of this act, the brass troy pound weight procured by the minister of the United States at London, in the year one thousand eight hundred and twenty-seven, for the use of the Mint, and now in the custody of the Mint at Philadelphia, shall be the standard troy pound of the Mint of the United States, conformably to which the coinage thereof shall be regulated.

SEC. 51. *And be it further enacted*, That it shall be the duty of the Director of the Mint to procure for each mint and assay office, and safely to keep thereat, a series of standard weights corresponding to the aforesaid troy pound, consisting of an one-pound weight and the requisite subdivisions and multiples thereof, from the hundredth part of a grain to twenty-five pounds; and that the troy weights ordinarily employed in the transactions of each mint and assay offices shall be regulated according to the above standards at least once in every year, under the inspection of the superintendent and assayer, and the accuracy of those used at the Mint at Philadelphia shall be tested annually, in the presence of the assay commissioners, on the day of the annual assay.

SEC. 52. *And be it further enacted*, That the working dies of each mint shall, at the end of each calendar year, be defaced and destroyed by the coiner in the presence of the superintendent and assayer.

SEC. 53. *And be it further enacted*, That national and other medals may be prepared at the Mint at Philadelphia, under such regulations as the superintendent, with the approval of the Director, may prescribe: *Provided*, That such work does not interfere with the regular coinage operations of said Mint.

SEC. 54. *And be it further enacted*, That the moneys arising from all charges and deductions on and from gold and silver bullion, and the manufacture of medals, and from all other sources, except as hereinbefore provided, shall from time to time be paid and covered into the treasury of the United States; and no part of such deductions or medal charges, or profit on silver, or minor coinage shall be expended in salaries or wages; but all expenditures of the mints and assay offices not herein otherwise provided for shall be paid from appropriations made by law on estimates furnished by the Secretary of the Treasury.

SEC. 55. *And be it further enacted*, That the officers of the United States assay office at New York shall be a superintendent, an assayer, and a melter and refiner, who shall be appointed by the President, by and with the advice and consent of the Senate. The business of the assay office shall be in all respects similar to that of the mints, except that bars only, refined or unrefined, and not coin, shall be manufactured therein; and no silver, copper, or nickel shall be purchased for small silver, or minor coinage. All bullion intended by the depositor to be converted into coins of the United States shall, as soon as assayed, parted, and refined, and its net value certified, be transferred to the Mint at Philadelphia, under such directions as shall be made by the Secretary of the Treasury, at the expense of the contingent fund of the Mint, and shall be there coined and the proceeds returned to the assay office; and the Secretary of the Treasury is hereby authorized to make the necessary arrangements for the adjustment of the accounts upon such transfers between the respective offices.

SEC. 56. *And be it further enacted*, That the duties of superintendent, assayer, and melter and refiner of said office shall correspond to those of superintendents, assayers, and melter and refiners of the mints, and all parts of this act relating to the mints and their officers, the duties and responsibilities of such officers, and others employed therein, the oath to be taken, and the bonds and sureties to be given by them, (as far as the same may be applicable,) shall extend to the assay office hereby established, and to its officers, assistants, clerks, workmen, and others employed therein.

SEC. 57. *And be it further enacted*, That there shall be allowed to the officers of the assay office at New York the following salaries per annum: To the superintendent five thousand dollars; to the assayer, and melter and refiner, each three thousand five hundred dollars; and the salaries to assistants and clerks, and wages to workmen,

and their manner of appointment, shall be determined and regulated as heretofore directed in regard to the mints.

SEC. 58. *And be it further enacted,* That the operations of melting, parting, refining, and assaying in the said office, shall be under the general directions of the Director of the Mint, in subordination to the Secretary of the Treasury; and it shall be the duty of the said Director to prescribe such regulations and to order such tests as shall be requisite to insure faithfulness, accuracy, and uniformity in the operations of the said office.

SEC. 59. *And be it further enacted,* That the business of the branch mint at Denver, which shall hereafter be conducted as an assay office, the assay office at Boise City, Idaho, and all other assay offices now established, or hereafter to be established, shall be confined to the receipt of gold and silver bullion, melting and refining by fluxes, assay, and return to depositors of the same, in bars, with the weight and fineness stamped thereon.

SEC. 60. *And be it further enacted,* That the officers of such assay offices, when their services are necessary, shall consist of an assayer, who shall have charge thereof, and a melter, to be appointed by the President, by and with the advice and consent of the Senate; and the assayer may employ as many clerks, workmen, and laborers, under the direction of the Secretary of the Treasury, as may be provided for by law. The salaries of said officers and clerks shall not exceed the following: To the assayer, the sum of three thousand dollars; to the melter, the sum of two thousand five hundred dollars; to the clerks, eighteen hundred dollars each; and the subordinate workmen and laborers shall receive such wages as are customary, according to their respective stations and occupations.

SEC. 61. *And be it further enacted,* That the officers and clerks to be appointed at such assay offices, before entering upon the execution of their offices, shall take an oath or affirmation before some judge of the United States, or of the supreme court of said Territory, as prescribed by the act of July twenty, eighteen hundred and sixty-two, and each become bound to the United States of America, with one or more sureties, to the satisfaction of the Director of the Mint, or of one of the judges of the supreme court of the State or Territory in which the same may be located, and of the Secretary of the Treasury, with the condition of the faithful performance of the duties of their offices; and the said assayers shall discharge the duties of disbursing agents for the payment of the expenses of their respective assay offices.

SEC. 62. *And be it further enacted,* That the general direction of the business of said assay offices of the United States shall be under the control and regulation of the Director of the Mint, subject to the approbation of the Secretary of the Treasury; and for that purpose, it shall be the duty of the said Director to prescribe such regulations and to require such returns periodically and occasionally, and to establish such charges for melting, assaying, and stamping bullion, as shall appear to him to be necessary for the purpose of carrying into effect the intention of this act in establishing such assay offices.

SEC. 63. *And be it further enacted,* That all the provisions of this act for the regulation of the mints of the United States, and for the government of the officers and persons employed therein, and for the punishment of all offenses connected with the mint or coinage of the United States, shall be, and they are hereby, declared to be in full force in relation to the assay offices by this act established, as far as the same may be applicable thereto.

SEC. 64. *And be it further enacted,* That if any person or persons shall falsely make, forge, or counterfeit, or cause or procure to be falsely made, forged, or counterfeited, or willingly aid or assist in falsely making, forging, or counterfeiting, any coins, bars, ingots, or disks, in resemblance or similitude of the gold or silver coins, bars, ingots, or disks which have been, or hereafter may be, coined or stamped at the mints and assay offices of the United States; or in resemblance or similitude of any foreign gold or silver coin which by law is, or hereafter may be, made current in the United States, or are in actual use and circulation as money within the United States; or shall pass, utter, publish, or sell, or attempt to pass, utter, publish, or sell, or bring into the United States, from any foreign place, or have in his possession any such false, forged, or counterfeited coins, bars, ingots, or disks, knowing the same to be false, forged, or counterfeited, every person so offending shall be deemed guilty of felony, and shall, on conviction thereof, be punished by fine, not exceeding five thousand dollars, and by imprisonment and confinement at hard labor, not exceeding ten years, according to the aggravation of the offense.

SEC. 65. *And be it further enacted,* That if any person or persons shall falsely make, forge, or counterfeit, or cause or procure to be falsely made, forged, or counterfeited, or willingly aid or assist in falsely making, forging, or counterfeiting, any coin in the resemblance or similitude of any of the minor coinage which has been, or hereafter may be coined at the mints of the United States; or shall pass, utter, publish, or sell, or bring into the United States from any foreign place, or have in his possession, any such false, forged, or counterfeited coin, with intent to defraud any body, politic

or corporate, or any person or persons whatsoever, every person so offending shall be deemed guilty of felony, and shall, on conviction thereof, be punished by fine, not exceeding one thousand dollars, and by imprisonment and confinement to hard labor not exceeding three years.

SEC. 66. *And be it further enacted,* That if any person shall fraudulently and for gain's sake, by any art, way, or means whatsoever, deface, mutilate, impair, diminish, falsify, scale, or lighten the gold or silver coins which have been, or which shall hereafter be, coined at the mints of the United States, or any foreign gold or silver coins, which are by law made current, or are in actual use and circulation as money within the United States, every person so offending shall be deemed guilty of high misdemeanor, and shall be imprisoned not exceeding two years, and fined not exceeding two thousand dollars.

SEC. 67. *And be it further enacted,* That if any of the gold or silver coins which shall be struck or coined at any of the mints of the United States shall be debased, or made worse as to the proportion of fine gold or fine silver therein contained; or shall be of less weight or value than the same ought to be, pursuant to the several acts relative thereto; or if any of the weights used at any of the mints or assay offices of the United States shall be defaced, increased, or diminished through the default or connivance of any of the officers or persons who shall be employed at the said mints, with a fraudulent intent; and if any of the said officers or persons shall embezzle any of the metals which shall at any time be committed to their charge for the purpose of being coined, or any of the coins which shall be struck or coined at the said mints, or any metals, coins, or other moneys of the said mints or assay offices at any time committed to their charge, or of which they may have assumed the charge, every such officer or person who shall commit any or either of the said offenses shall be deemed guilty of felony and shall be imprisoned at hard labor for a term not less than one year nor more than ten years, and shall be fined in a sum not exceeding ten thousand dollars.

SEC. 68. *And be it further enacted,* That this act shall take effect in two months from the date of its passage; at the expiration of which time the offices of the treasurer of the Mint in Philadelphia, San Francisco, and New Orleans shall be vacated, and the assistant treasurer at New York shall cease to perform the duties of treasurer of the assay office. The other officers and employés of the mints and assay offices now appointed shall continue to hold their respective offices, they having first given the necessary bonds, until further appointments may be required; the Director of the Mint at Philadelphia being styled and acting as superintendent thereof. The duties of the treasurers shall devolve, as herein provided, upon the superintendents, and said treasurers shall act only as assistant treasurers of the United States: *Provided,* That the salaries heretofore paid to the treasurers of the Mint at Philadelphia, San Francisco, and New Orleans, acting as assistant treasurers, shall hereafter be paid to them as "assistant treasurers of the United States;" and that the salary of the assistant treasurer at New York shall not be diminished by the vacation of his office as treasurer of the assay office.

SEC. 69. *And be it further enacted,* That the mints and assay offices authorized by this act shall be known as the Mint of the United States at Philadelphia, the mint of the United States at San Francisco, the mint of the United States at Carson; the United States assay office at New York, the United States assay office at Denver, and the United States assay office at Boise City, Idaho; and all unexpended appropriations heretofore authorized by law for the use of the Mint of the United States at Philadelphia, the branch mint of the United States in California, the branch mint of the United States at Denver, the United States assay office in New York, and the United States assay office at Boise City, Idaho, are hereby authorized to be transferred for the account and use of the institutions established and located respectively at the places designated by this act.

SEC. 70. *And be it further enacted,* That the Secretary of the Treasury be, and is hereby, authorized at his discretion to remove the whole or any part of the machinery, apparatus, and fixtures of the branch mints of the United States at New Orleans, Charlotte, and Dahlonega, to any other institution authorized by this act, or at his discretion to sell at public sale, all the real estate, buildings, machinery, apparatus, and fixtures belonging thereto.

SEC. 71. *And be it further enacted,* That this act may be cited as the "coinage act, 1870;" and all other acts and parts of acts pertaining to the mints, assay offices, and coinage of the United States are hereby repealed.

APPENDIX B.—TABLE OF WASTAGE.

STATEMENT EXHIBITING WASTAGES ON PRECIOUS METALS OPERATED UPON AT THE UNITED STATES MINT, AT PHILADELPHIA, FROM 1857 TO 1869, INCLUSIVE.

Period.	Ounces operated upon.	Wastage.	
		Legal.	Actual.
MELTER AND REFINER'S GOLD.			
From Aug. 16, 1856, to Aug. 16, 1857	447,715.557	895.431	7.416
From Aug. 16, 1857, to Dec. 31, 1857	1,131,919.508	2,263.839	107.884
From Jan. 1, 1860, to June 30, 1860	695,761.501	1,391.523	4.629
From July 1, 1860, to Dec. 31, 1861	7,178,270.075	14,356.540	1,099.098
For 1862	359,501.705	719.003	697.341
From Jan. 1, 1863, to Feb. 17, 1864	307,524.974	615.049	337.743
From Feb. 17, 1864, to Mar. 31, 1865	412,646.014	825.292	23.044
From Mar. 31, 1865, to May 12, 1868	2,598,642.198	5,197.284	577.947
From May 13, 1868, to Mar. 31, 1869	228,062.112	456.124	5.973
Total	13,360,043.644	26,720.085	2,861.075
MELTER AND REFINER'S SILVER.			
From Jan. 1, 1857, to Aug. 15, 1857	4,251,159.45	8,502.32	1,481.55
From Aug. 15, 1857, to Dec. 31, 1859	10,348,546.38	20,697.09	11,019.18
From Jan. 1, 1860, to Dec. 31, 1861	2,482,195.01	4,964.39	281.09
For 1862	4,899,230.16	9,798.46	5,488.33
From Feb. 17, 1864 (including 1863)	850,670.04	1,701.34	1,426.75
From Feb, 17, 1864, to Mar. 31, 1865	510,626.37	1,021.25	23.29
From Apr. 1, 1865, to May 21, 1866	387,302.41	744.60	39.64
From May 21, 1866, to May 12, 1868	1,729,114.32	3,458.23	219.73
From May 13, 1868, to Mar. 31, 1869	691,680.51	1,383.36	704.80
Total	26,150,524.65	52,301.04	20,684.36
CHIEF COINER'S GOLD.			
1857	1,062,454.480	1,593.681	145.656
1858	387,473.600	581.210	4.560
1859	141,578.100	212.367	8.886
1860	5,101,224.481	7,651.836	36.235
June 30, 1861	2,759,800.580	4,139.700	135.522
Dec. 31, 1861	350,026.210	525.039	34.160
1862	282,638.700	423.958	7.515
1863	403,146.150	604.719	5.844
1865	692,543.850	1,038.815	12.853
1866 to Sept. 30	931,070.100	1,396.605	59.525
From Sept. 30, 1866, to Mar. 31, 1868	1,114,398.150	1,691.597	50.081
From Mar. 31, 1868, to Mar. 31, 1869	240,894.000	361.331	11.439
Total	13,708,142.401	20,562.189	523.715
CHIEF COINER'S SILVER.			
1857	6,412,248.70	12,824.49	2,973.21
1858	6,869,825.60	13,739.65	1,613.41
1859	1,565,672.90	3,131.34	140.32
1860	1,023,691.60	2,047.38	165.74
June 30, 1861	2,039,376.84	4,078.75	505.44
Dec. 31, 1861	2,669,676.28	5,399.35	622.14
1862	830,384.05	1,660.76	762.37
1863	478,438.40	956.87	193.20
1864	363,283.70	726.56	137.53
1865	467,454.75	934.91	219.91
1866 to Sept. 30	473,687.10	947.37	295.68
From Sept. 30, 1866, to Mar. 31, 1868	765,886.13	1,531.37	151.25
From Mar. 31, 1868, to Mar. 31, 1869	739,094.60	1,478.18	191.82
Total	25,437,815.25	40,875.56	8,163.84

The amount of bullion operated upon at the branch mint at San Francisco and at the assay office in New York is much greater, and the average wastage per ounce considerably less, than at Philadelphia.

APPENDIX C.—TABLES OF UNITED STATES COINAGE EXISTING AND PROPOSED.

TABLE I.—EXISTING COINAGE.

[Table showing the standard weights, expressed both in troy and metric units, of the several coins (gold, silver, nickel, and bronze,) of the United States, now issued under authority of law; together with the standard proportions of fine metal and alloy of each description of coin; also, the tolerance—or rate of deviation from the standard allowed by law—in the weight, both of single pieces and of large numbers when delivered together, and the tolerance as to fineness; also, the extent to which the several descriptions of coins are made legal tender in payment of debt.]

Denomination of coins.	Fineness in thousandths.		Number of pieces that may be coined from 100 grams of standard metal.	Standard weight of pure metal.		Standard weight of coin.		Tolerance of the mint, or deviation allowed—												Ratio of the weight of standard silver coin to that of standard gold coin of like denomination.	To what extent a legal tender.
								In fineness.	In the weight of single pieces.			In the weight of a large number of coins taken together.									
												Quantity delivered.		Deviation.							
														Troy pennyweights.	Equivalent number of—				Equivalent value of the amount of deviation allowed in $1,000 worth of coins taken together.		
	Pure metal.	Alloy.		Troy wt.	Metric weight.	Troy wt.	Metric weight.	Thousandths.	Troy grains.	Milligrams.[1]	Equivalent value of the amount of deviation allowed in $1,000 worth of coins taken singly.	Number of pieces.	Value.		Troy grains.	Grams.	Value.			
GOLD.				Grains.	Grams.	Grains.	Grams.				*Cents.*						*Cents.*	*Cents.*			
Double eagle..	900	100	2.991—	464.4	30.0926+	516	33.4363—		2	32.40—	96.9	1,000	$20,000	3	72	4.655+	279.1+	14.0—		In all amounts.
Eagle.....	900	100	5.982—	232.2	15.0463+	258	16.7181+		2	32.40—	193.8	1,000	10,000	2	48	3.110+	186.1—	18.6+		Do.
Half eagle....	900	100	11.963+	116.1	7.5232—	129	8.3591—		2	32.40—	387.6	1,000	5,000	1½	36	2.333—	139.5+	27.9+		Do.
3-dollar piece..	900	100	19.938+	69.66	4.5139—	77.4	5.0154+		2	16.20—	323	1,000	3,000	1	24	1.555+	93.0+	31.0+		Do.
Quarter eagle.	900	100	23.926+	58.05	3.7616—	64.5	4.1795+		2	16.20—	387.6	1,000	2,500	1	24	1.555+	93.0+	37.2+		Do.
1-dollar piece..	900	100	59.815+	23.22	1.5046+	25.8	1.6718+		2	16.20—	969	1,000	1,000	½	12	0.778—	46.5+	46.5+		Do.
SILVER.																					
Dollar.....	900	100	3.741+	371.25	24.0566+	412.5	26.7296—		3	97.20—	363 7/11	1,000	1,000	4	96	6.221—	33 3/11	23 3/11	16.0—		Do.
Half dollar ...	900	100	8.038—	172.8	11.1973—	192	12.4414—		3	97.20—	781¼	1,000	500	3	72	4.665+	18¾	37½	14.8+		Not exceeding $5.
Quarter dollar.	900	100	16.075+	86.4	5.5986+	96	6.2207—		3	1	64.80—	1,041⅔	1,000	250	2	48	3.110+	12½	50	14.8+		Do.
Dime.....	900	100	40.188+	34.56	2.2395—	38.4	2.4883—		3	½	32.40—	1,302 1/12	1,000	100	1	24	1.555+	6½	62½	14.8+		Do.
Half dime	900	100	80.377—	17.28	1.1197+	19.2	1.2441+		3	¼	32.40—	2,604⅙	1,000	50	1	24	1.555+	6¼	125	14.8+		Do.
3-cent piece...	900	100	133.961+	10.368	0.6716+	11.52	0.7465—	.....		⅛	32.40—	4,340⅓	1,000	30	1	24	1.555+	6¼	208⅓	14.8+		
NICKEL.																					
5-cent piece[2]..	.....	.....	20.000	.....	.....	77.16	5.000 —	.....	2	129.60	.....	.....	.....	.....	.....	.....	.....	.....	.....		Not exceeding $1.
3-cent piece[2]..	.....	.....	51.441+	.....	.....	30	1.9440—	.....	4	259.20	.....	.....	.....	.....	.....	.....	.....	.....	.....		Not exceeding 60c.
BRONZE.																					
2-cent piece[3]..	.....	.....	16.075+	.....	.....	96	6.2207—	.....	4	259.20	.....	.....	.....	.....	.....	.....	.....	.....	.....		Not exceeding 4c.
1-cent piece[3]..	.....	.....	32.151—	.....	.....	48	3.1103+	.....	4	259.20	.....	.....	.....	.....	.....	.....	.....	.....	.....		Do.

[1] One thousand milligrams make 1 gram; 1 gram equals 15.4323488 troy grains; 1 troy grain equals 64.79895 milligrams.

[2] Nickel and copper—one-fourth copper, three-fourths nickel.

[3] Tin and zinc, 5 per cent; copper, 95 per cent.

TABLE II.—PROPOSED COINAGE, ACCORDING TO THE ACCOMPANYING BILL.

Denomination of coins.	Fineness in thousandths.		Number of pieces that may be coined from 100 grams of standard metal.	Standard weight of pure metal.		Standard weight of coin.		Tolerance of the mint, or deviation allowed—												Ratio of the weight of standard silver coin to that of standard gold coin of like denomination.	To what extent a legal tender.
								In fineness.	In the weight of single pieces.			In the weight of a large number of coins taken together.									
												Quantity delivered.		Deviation.							
															Equivalent number of—						
	Pure metal.	Alloy.		Troy weight.	Metric weight.	Troy weight.	Metric weight.	Thousandths.	Troy grains.	Milligrams.	Equivalent value of the amount of deviation allowed in $1,000 worth of coins taken singly.	Number of pieces.	Value.	Troy ounce.	Troy grains.	Grams.	Value.	Equivalent value of the amount of deviation allowed in $1,000 worth of coins taken together.		
				Grains.	Grams.	Grains.	Grams.														
GOLD.											*Cents.*						*Cents.*	*Cents.*		
Double eagle	900	100	2.991—	464.4	30.0926+	516	33.4363—	1	1/4	32.40—	96.9	250	$5,000	0.01	4.8	0.3110+	18.60	3.72	.....	In all amounts.
Eagle	900	100	5.982—	232.2	15.0463+	258	16.7181+	1	1/8	24.30—	145.3	500	5,000	.01	4.8	.3110+	18.60	3.72	.....	Do.
Half eagle	900	100	11.963+	116.1	7.5232—	129	8.3591—	1	1/16	16.20—	193.8	1,000	5,000	.01	4.8	.3110+	18.60	3.72	.....	Do.
3-dollar piece	900	100	19.938+	69.66	4.5139—	77.4	5.0154+	1	1/32	10.80—	215½	1,000	3,000	.0075	3.6	.2332+	13.95	4.65	.....	Do.
Quarter eagle	900	100	23.926+	58.05	3.7616—	64.5	4.1795+	1	1/64	10.80—	258.4	2,000	5,000	.01	4.8	.3110+	18.60	3.72	.....	Do.
1-dollar piece	900	100	59.815+	23.22	1.5046+	25.8	1.6718+	1	1/128	5.40—	323	1,000	1,000	.005	2.4	.1555+	9.30	9.30	.....	Do.
SILVER.																				
Half dollar	900	100	8.038—	172.8	11.1973—	192	12.4414—	2½	1	64.80—	520⅝	2,000	1,000	.02	9.6	.622 +	2½	2½	14.8	In sums less than $1.
Quarter dollar	900	100	16.075+	86.4	5.5986+	96	6.2207—	2½	1	64.80—	1,041⅝	4,000	1,000	.02	9.6	.622 +	2½	2½	14.8	Do.
Dime	900	100	40.188+	34.56	2.2395—	38.4	2.4883—	2½	½	32.40—	1,302½	1,000	100	.01	4.8	.311 +	1¼	12½	14.8	Do.
NICKEL.																				
5-cent piece[1]	.....	.....	20	.....	.....	77.16+	5	(2)	3	194.40	.....	.....	.....	.....	.....	.....	.....	.....	.....	In payments not exceeding 20 cents each.
3-cent piece[1]	.....	.....	33⅓	.....	.....	46.30—	3	(2)	2	129.60	.....	.....	.....	.....	.....	.....	.....	.....	.....	
1-cent piece[1]	.....	.....	66⅔	.....	.....	23.15—	1½	(2)	2	129.60	.....	.....	.....	.....	.....	.....	.....	.....	.....	

[1] Nickel and copper—nickel, one-fourth; copper, three-fourths.

[2] Twenty-five in the proportion of nickel.

REMARKS.—The proposed bill introduces no change in the standards, either as to the weight or fineness of the gold and fractional silver coins of the United States; but proposes certain modifications as to the tolerance in weight and fineness, and reduces the limit within which the coins of silver and nickel are legal tender.

TABLE III.—METRIC SYSTEM OF COINAGE—SUGGESTED.

[The standard weight and the tolerance as to weight are expressed in this table in terms of the *gram*, the metric unit of weight: 1 gram=15.3423488 troy grains.]

Denomination of coins.	Fineness in thousandths.		Number of pieces that may be coined from 100 grams of standard metal.	Standard weight of pure metal, metric weight, grams.	Standard weight of coin, metric weight, grains.	Tolerance of the mint, or deviation allowed.							Ratio of the weight of standard silver coin to that of standard gold coin of like denomination.	To what extent a legal tender.
						In fineness.	In the weight of single pieces.		In the weight of a large number of pieces taken together.					
									Quantity delivered.		Deviation allowed.			
	Pure metal.	Alloy.				Thousandths.	Milligrams.	Equivalent value of the amount of deviation allowed in $1,000 worth of coins taken singly.	Number of pieces.	Value.	Grains.	Value.	Equivalent value of the amount of deviation allowed in $1,000 worth of coins taken together.	
GOLD.								*Cents.*				*Cents.*	*Cents.*	
Double eagle[1]	900	100	3	30	33½	1	33½	100	250	$5,000	½	20	4	In all amounts.
Eagle	900	100	6	15	16⅔	1	25	150	500	5,000	½	20	4	Do.
Half eagle	900	100	12	7.5	8⅓	1	15	180	1,000	5,000	½	20	4	Do.
3-dollar piece	900	100	20	4.5	5	1	12	240	1,000	3,000	½	15	5	Do.
Quarter eagle	900	100	24	3.75	4⅙	1	10	240	2,000	5,000	½	20	4	Do.
1-dollar piece	900	100	60	1.5	1⅔	1	5	300	1,000	1,000	3/20	10	10	Do.
SILVER.														
Half dollar	900	100	8	11.25	12.5	2½	62½	500	2,000	1,000	5/8	2½	2½	15 to 1	Not to exceed $1 in any one payment.
Quarter dollar	900	100	16	5.625	6.25	2½	62½	1,000	4,000	1,000	5/8	2½	2½	15 to 1	Do.
Dime	900	100	40	2.25	2.5	2½	50	2,000	1,000	100	¼	1	10	15 to 1	Do.
NICKEL.														
5-cent piece[2]	.....	.....	20	.....	5	25 (as to nickel.)	200	.....	.....	.....	.....	.....	.....	.....	Not to exceed 20 cts. in any one payment.
3-cent piece[2]	.....	.....	33⅓	.....	3		150	.....	.....	.....	.....	.....	.....	.....	Do.
1-cent piece[2]	.....	.....	66⅔	.....	1.5		100	.....	.....	.....	.....	.....	.....	.....	Do.

[1] The double eagle here proposed is the exact equivalent, both as to weight and fineness, of the German Union crown, the only *gold* coin having exact and simple relations to the metric unit of weight yet issued by any country. It is smaller than the standard double eagle now authorized by about three-tenths of one per cent., (more exactly by 3.088— parts in one thousand). The other gold coins specified are in proportion. Two of the *silver* half-dollar pieces here described constitute in weight and fineness an exact equivalent to the silver five-franc piece of France; and the other silver coins are of proportionate weight and fineness.

[2] Nickel and copper: nickel, one-fourth; copper three-fourths.

TABLE IV.—COMPARISON OF COINAGE, EXISTING AND PROPOSED.

Comparison of the existing coinage, the coinage proposed in the bill, and the suggested metric coinage as to standard weight and tolerance in weight.

Denomination of coins.	Tolerance of the mint, or amount of deviation allowed.												Weight of coins.								
	In the weight of single pieces.						In the weight of large amounts.						Weight of pure metal.			Weight of standard metal.			Number of pieces that may be coined from 100 grams of standard metal.		
	Value per 1,000 pieces.			Value per 1,000 dollars' worth.			Value per 1,000 pieces.			Value per 1,000 dollars' worth.											
	Existing law.	Proposed bill.	Metric proposition.	Existing law.	Proposed bill.	Metric proposition.	Existing law.	Proposed bill.	Metric proposition.	Existing law.	Proposed bill.	Metric proposition.	Existing law.	Proposed bill.	Metric proposition.	Existing law.	Proposed bill.	Metric proposition.	Existing law.	Proposed bill.	Metric proposition.
GOLD.	*Cents.*	*Cents.*	*Cts.*	*Cents.*	*Cents.*	*Cts.*	*Cents.*	*Cents.*	*Cts.*	*Cents.*	*Cents.*	*Cts.*	*Grams.*	*Grams.*	*Grams.*	*Grams.*	*Grams.*	*Grams.*	*Pieces.*	*Pieces.*	*Pcs.*
Double eagle	1938—	1938—	2000	96 9/10	96 9/10	100	279.1+	74 4/10	80	14.0—	3 7/100	4	30.0926+	30.0926+	30	33.4363—	33.4363—	33⅓	2.991—	2.991—	3
Eagle	1938—	1453+	1500	193 5/10	145 3/10	150	186.0+	37 2/10	40	18.6+	3 7/100	4	15.0463+	15.0463+	15	16.7181+	16.7181+	16⅔	5.982—	5.982—	6
Half eagle	1938—	969—	900	387 6/10	193 6/10	180	139.5+	18 6/10	20	27.9+	3 7/100	4	7.5232—	7.5232—	7.5	8.3591—	8.3591—	8⅓	11.963+	11.963+	12
3-dollar piece	969—	646—	720	323	215⅓	240	93.0+	13 15/100	15	31.0+	4 8/100	5	4.5139—	4.5139—	4.5	5.0154+	5.0154+	5	19.938+	19.938+	20
Quarter eagle	969—	646—	600	387 6/10	258 4/10	240	93.0+	9 3/10	10	37.2+	3 7/100	4	3.7616—	3.7616—	3.75	4.1795+	4.1795+	4⅛	23.926+	23.926+	24
1-dollar piece	969—	323—	300	969	323—	300	46.5+	9 3/10	10	46.5+	9 3/100	10	1.5046+	1.5046+	1.5	1.6718+	1.6718+	1⅔	59.815+	59.815+	60
SILVER.																					
Dollar[1]	363 7/11			363 7/11			23 3/11			23 3/11			24.0566+			26.7296—			3.741+		
Half dollar	390⅝	260 5/12	250	781¼	520⅝	500	18¾	1¼	1¼	37½	2½	2½	11.1973—	11.1973—	11.25	12.4414—	12.4414—	12.5	8.038—	8.038—	8
Quarter dollar	260⅞	260 5/12	250	1041⅝	1041⅔	1000	12½	⅝	⅝	50	2½	2½	5.5986+	5.5986—	5.625	6.2207—	6.2207—	6.25	16.075+	16.075+	16
Dime	130½	130 5/10	200	1302 1/2	1302 1/2	2000	6¼	1¼	1	62½	12½	10	2.2395—	2.2395—	2.25	2.4883—	2.4883—	2.5	40.188+	40.188+	40
Half dime[1]	130½			2604½			6¼			125			1.1197+			1.2441+			80.377—		
3-cent piece[1]	130⅓			4340			6¼			208⅓			0.6718+			0.7465—			133.961+		
NICKEL.																					
5-cent piece																5.000	5	5	20	20	20
3-cent piece																1.944—	3	3	51.441+	33⅓	33⅓
1-cent piece[2]																	1⅓	1.5		66⅔	66⅔
BRONZE.																					
2-cent piece																6.2207—					
1 cent piece																3.1103+					

[1] Dollar, half dime, and three-cent piece (silver) and the two and one cent pieces, bronze, omitted in the proposed bill.

[2] Proposed new coin.

APPENDIX D.—ENGLISH COINAGE ACT, APRIL 4, 1870.

33 VICT.—CHAP. 10.)

AN ACT to consolidate and amend the law relating to the coinage and Her Majesty's mint. [4th April, 1870.]

Whereas it is expedient to consolidate and amend the law relating to the coinage and her Majesty's mint: Be it enacted by the Queen's most excellent Majesty, by and with the advice and consent of the lords spiritual and temporal, and commons, in this present Parliament assembled, and by the authority of the same, as follows:

1. This act may be cited as "The coinage act, 1870."

2. In this act, the term "treasury" means the lord high treasurer for the time being, or the commissioners of her Majesty's treasury for the time being, or any two of them; the term "the mint" means, except as expressly provided, her Majesty's royal mint in England; the term "British possession" means any colony, plantation, island, territory, or settlement within her Majesty's dominions and not within the United Kingdom; And the term "person" includes a body corporate.

3. All coins made at the mint of the denominations mentioned in the first schedule to this act shall be of the weight and fineness specified in that schedule, and the standard trial plates shall be made accordingly. If any coin of gold, silver, or bronze, but of any other denomination than that of the coins mentioned in the first schedule to this act, is hereafter coined at the mint, such coin shall be of a weight and fineness bearing the same proportion to the weight and fineness specified in that schedule as the denomination of such coin bears to the denominations mentioned in that schedule: *Provided*, That in the making of coins a remedy (or variation from the standard weight and fineness specified in the said first schedule) shall be allowed of an amount not exceeding the amount specified in that schedule.

4. A tender of payment of money, if made in coins which have been issued by the mint in accordance with the provisions of this act, and have not been called in by any proclamation made in pursuance of this act, and have not become diminished in weight, by wear, or otherwise, so as to be of less weight than the current weight, that is to say, than the weight (if any) specified as the least current weight in the first schedule to this act, or less than such weight as may be declared by any proclamation made in pursuance of this act, shall be a legal tender—in the case of gold coins for a payment of any amount; in the case of silver coins for a payment of an amount not exceeding forty shillings, but for no greater amount; in the case of bronze coins for a payment of an amount not exceeding one shilling, but for no greater amount. Nothing in this act shall prevent any paper currency which under any act or otherwise is a legal tender from being a legal tender.

5. No piece of gold, silver, copper, or bronze, or of any metal or mixed metal, of any value whatever, shall be made or issued, except by the mint, as a coin or a token for money, or as purporting that the holder thereof is entitled to demand any value denoted thereon. Every person who acts in contravention of this section shall be liable on summary conviction to a penalty not exceeding twenty pounds.

6. Every contract, sale, payment, bill, note, instrument, and security for money, and every transaction, dealing, matter, and thing whatever relating to money, or involving the payment of, or the liability to pay any money, which is made, executed, or entered into, done or had, shall be made, executed, entered into, done and had according to the coins which are current and legal tender in pursuance of this act, and not otherwise, unless the same be made, executed, entered into, done or had according to the currency of some British possession, or some foreign state.

7. Where any gold coin of the realm is below the current weight as provided by this act, or where any coin is called in by any proclamation, every person shall, by himself or others, cut, break, or deface any such coin tendered to him in payment, and the person tendering the same shall bear the loss. If any coin, cut, broken, or defaced in pursuance of this section is not below the current weight, or has not been called in by any proclamation, the person cutting, breaking, or defacing the same shall receive the same in payment according to its denomination. Any dispute which may arise under this section may be determined by a summary proceeding.

8. Where any person brings to the mint any gold bullion, such bullion shall be assayed and coined, and delivered out to such person, without any charge for such assay or coining, or for waste in coinage: *Provided*, That—1, if the fineness of the whole of the bullion so brought to the mint is such that it cannot be brought to the standard fineness under this act of the coin to be coined thereout, without refining some portion of it, the master of the mint may refuse to receive, assay, or coin such bullion; 2, where the bullion so brought to the mint is finer than the standard fineness under this act of the coin to be coined thereout, there shall be delivered to the person bringing the same such additional amount of coin as is proportionate to such superior fineness. No undue preference shall be shown to any person under

this section, and every person shall have priority according to the time at which he brought such bullion to the mint.

9. The treasury may from time to time issue to the master of the mint, out of the growing produce of the consolidated fund, such sums as may be necessary to enable him to purchase bullion in order to provide supplies of coin for the public service.

10. All sums received by the master of the mint, or any deputy master or officer of the mint, in payment for coin produced from bullion purchased by him, and all fees and payments received by the master or any deputy master or officer of the mint as such, shall (save as otherwise provided in the case of any branch mint in a British possession by a proclamation respecting such branch mint) be paid into the receipt of the exchequer, and carried to the consolidated fund.

11. It shall be lawful for her Majesty, with the advice of her privy council, from time to time, by proclamation, to do all or any of the following things, namely: 1. To determine the dimension of and design for any coin. 2. To determine the denominations of coins to be coined at the mint. 3. To diminish the amount of remedy allowed by the first schedule to this act in the case of any coin. 4. To determine the weight (not being less than the weight, if any, specified in the first schedule to this act) below which a coin, whether diminished in weight by wear or otherwise, is not to be a current or a legal tender. 5. To call in coins of any date or denomination, or any coins coined before the date in the proclamation mentioned. 6. To direct that any coins, other than gold, silver, or bronze, shall be current and be a legal tender for the payment of any amount not exceeding the amount specified in the proclamation, and not exceeding five shillings. 7. To direct that coins coined in any foreign country shall be current, and be a legal tender, at such rates, up to such amounts, and in such portion of her Majesty's dominions as may be specified in the proclamation; due regard being had in fixing those rates to the weight and fineness of such coins, as compared with the current coins of this realm. 8. To direct the establishment of any branch of the mint in any British possession, and impose a charge for the coinage of gold thereat; determine the application of such charge; and determine the extent to which such branch is to be deemed part of the mint, and to which coins issued therefrom are to be current and be a legal tender, and to be deemed to be issued from the mint. 9. To direct that the whole or any part of this act shall apply to and be in force in any British possession, with or without any modifications contained in the proclamation. 10. To regulate any matters relative to the coinage and the mint within the present prerogative of the Crown which are not provided for by this act. 11. To revoke or alter any proclamation previously made. Every such proclamation shall come into operation on the date therein in that behalf mentioned, and shall have effect as if it were enacted in this act.

12. For the purpose of ascertaining that coins issued from the mint have been coined in accordance with this act, a trial of the pyx shall be held at least once in every year in which coins have been issued from the mint. It shall be lawful for her Majesty, with the advice of her privy council, from time to time, by order, to make regulations respecting the trial of the pyx and all matters incidental thereto, and in particular respecting the following matters, viz: 1. The time and place of the trial. 2. The setting apart out of the coins issued by the mint certain coins for the trial. 3. The summoning of a jury of not less than six out of competent freemen of the mystery of goldsmiths of the city of London or other competent persons. 4. The attendance at the trial of the jury so summoned, and of the proper officers of the treasury, the Board of Trade, and the mint, and the production of the coins so set apart, and of the standard trial plates and standard weights. 5. The proceeding at and conduct of the trial, including the nomination of some person to preside thereat, and the swearing of the jury, and the mode of examining the coins. 6. The recording and the publication of the verdict, and the custody of the record thereof, and the proceedings (if any) to be taken in consequence of such verdict. Every such order shall come into operation on the date therein in that behalf mentioned, and shall have effect as if it were enacted in this act, but may be revoked or altered by any subsequent order under this section.

13. The treasury may from time to time do all or any of the following things: 1. Fix the number and duties of the officers of and persons employed in the mint. 2. Make regulations and give directions (subject to the provisions of this act and any proclamation made thereunder) respecting the general management of the mint, and revoke and alter such regulations and directions.

MASTER AND OFFICERS OF MINT.

14. The chancellor of the exchequer for the time being shall be the master, worker, and warden of her Majesty's royal mint in England, and governor of the mint in Scotland: *Provided*, That nothing in this section shall render the chancellor of the exchequer incapable of being elected to or of sitting or voting in the House of

Commons, or vacate the seat of the person who at the passing of this act holds the office of chancellor of the exchequer. All duties, powers, and authorities imposed on or vested in or to be transacted before the master of the mint may be performed and exercised by or transacted before him or his sufficient deputy.

15. The treasury may from time to time appoint deputy masters and other officers and persons for the purpose of carrying on the business of the mint in the United Kingdom or elsewhere, and assign them their duties, and award them their salaries. The master of the mint may from time to time promote, suspend, and remove any such deputy masters, officers, and persons.

STANDARD TRIAL PLATES AND WEIGHTS.

16. The standard trial plates of gold and silver used for determining the justness of the gold and silver coins of the realm issued from the mint, which now exist or may hereafter be made, and all books, documents, and things used in connection therewith or in relation thereto, shall be in the custody of the Board of Trade, and shall be kept in such places and in such manner as the Board of Trade may from time to time direct; and the performance of all duties in relation to such trial plates shall be part of the business of the standard weights and measures department of the Board of Trade. The Board of Trade shall from time to time, when necessary, cause new standard trial plates to be made and duly verified, of such standard fineness as may be in conformity with the provisions of this act.

17. The standard weights for weighing and testing the coin of the realm shall be placed in the custody of the Board of Trade, and be kept in such places and in such manner as the Board of Trade may from time to time direct; and the performance of all duties in relation to such standard weights shall be part of the business of the standard weights and measures department of the Board of Trade. The Board of Trade shall from time to time cause weights of each coin of the realm for the time being, and of multiples of such of those weights as may be required, to be made and duly verified; and those weights, when approved by her Majesty in council, shall be the standard weights for determining the justness of the weight of and for weighing such coin. The master of the mint shall from time to time cause copies to be made of such standard weights, and once at least in every year the Board of Trade and the master of the mint shall cause such copies to be compared and duly verified with the standard weights in the custody of the Board of Trade. All weights which are not less in weight than the weight prescribed by the first schedule to this act for the lightest coin, and are used for weighing coin, shall be compared with the said standard weights, and if found to be just shall, on payment of such fee, not exceeding five shillings, as the Board of Trade from time to time prescribe, be marked by some officer of the standard weights and measures department of the Board of Trade with a mark approved of by the Board of Trade, and notified in the London Gazette; and a weight which is required by this section to be so compared, and is not so marked, shall not be deemed a just weight for determining the weight of gold and silver coin of the realm. If any person forges or counterfeits such mark, or any weight so marked, or willfully increases or diminishes any weight so marked, or knowingly utters, sells, or uses any weight with such counterfeit mark, or any weight so increased or diminished, or knowingly uses any weight declared by this section not to be a just weight, such person shall be liable to a penalty not exceeding fifty pounds. All fees paid under this section shall be paid into the exchequer, and carried to the consolidated fund.

LEGAL PROCEEDING.

18. Any summary proceeding under this act may be taken, and any penalty under this act may be recovered in England, before two justices of the peace, in manner directed by the act of the session of the eleventh and twelfth years of the reign of her present Majesty, chapter forty-three, intituled "An act to facilitate the performance of the duties of justices of the peace out of sessions within England and Wales with respect to summary convictions and orders," and any act amending the same. In Scotland, in manner directed by the summary procedure act, 1864. In Ireland, so far as respects Dublin, in manner directed by the acts regulating the powers of justices of the peace or the police of Dublin metropolis, and elsewhere in manner directed by the petty sessions (Ireland) act, 1851, and any act amending the same. In any British possession, in the courts, and before such justices or magistrates, and in the manner in which the like proceedings and penalties may be taken and recovered by the law of such possession, or as near thereto as circumstances admit, or in such other courts, or before such other justices or magistrates, or in such other manner as any act or ordinance having the force of law in such possession may from time to time provide.

MISCELLANEOUS.

19. This act, save as expressly provided by this act, or by any proclamation made thereunder, shall not extend to any British possession.

20. The acts mentioned in the first part of the second schedule to this act are hereby repealed to the extent in the third column of such schedule mentioned, and those mentioned in the second part of the same schedule are hereby repealed entirely: *Provided*, That—1, this repeal shall not affect anything already done or suffered, or any right already acquired or accrued; 2, all weights for weighing coin which have, before the passing of this act, been marked at the mint or by any proper officer shall be deemed to have been marked under this act; 3, every branch of the mint which, at the passing of this act, issues coins in any British possession shall, until the date fixed by any proclamation made in pursuance of this act with respect to such branch mint, continue in all respects to have the same power of issuing coins and be in the same position as if this act had not passed, and coins so issued shall be deemed for the purpose of this act to have been issued from the mint; 4, the said acts (unless relating to a branch mint and unless in the said schedule expressly otherwise mentioned) are not repealed so far as they apply to any British possession to which this act does not extend until a proclamation directing that this act or any part thereof, with or without any modification contained in the proclamation, shall be in force in such British possession comes into operation.

SCHEDULES.—FIRST SCHEDULE.

Denomination of coin.	Standard weight.		Least current weight.		Standard fineness.	Remedy allowance.		
	Imperial weight.	Metric weight.	Imperial weight.	Metric weight.		Weight per piece.		Millesimal fineness.
	Grains.	Grams.	Grains.	Grams.		Imperial grains.	Metric grams.	
GOLD.								
Five pound	616.37239	39.94028	612.50000	39.68935	Eleven-twelfths fine gold, one-twelfth alloy; or millesimal fineness, 916.66.	1.00000	0.06479	0.002
Two pound	246.54895	15.97611	245.00000	15.87574		0.40000	0.02592	
Sovereign	123.27447	7.98805	122.50000	7.93787		0.20000	0.01296	
Half sovereign	61.63723	3.99402	61.12500	3.96083		0.10000	0.00648	
SILVER.								
Crown	436.36363	28.27590	.....	.....	Thirty-seven-fortieths fine silver, three-fortieths alloy, or millesimal fineness, 925.	1.81818	0.11781	0.004
Half crown	218.18181	14.13795	.....	.....		0.90909	0.05890	
Florin	174.54545	11.31036	.....	.....		0.72727	0.04712	
Shilling	87.27272	5.65518	.....	.....		0.36363	0.02356	
Sixpence	43.63636	2.82759	.....	.....		0.18181	0.01178	
Groat, or fourpence	29.09090	1.88506	.....	.....		0.12121	0.00785	
Threepence	21.81818	1.41379	.....	.....		0.09090	0.00589	
Twopence	14.54545	0.94253	.....	.....		0.06060	0.00392	
Penny	7.27272	0.47126	.....	.....		0.03030	0.00196	
BRONZE.								
Penny	145.83333	9.44984	.....	.....	Mixed metal, copper, tin, and zinc.	2.91666	0.18899	None.
Halfpenny	87.50000	5.66990	.....	.....		1.75000	0.11339	
Farthing	43.75000	2.83495	.....	.....		0.87500	0.05669	

The weight and fineness of the coins specified in this schedule are according to what is provided by the act 56 George the Third, chapter sixty-eight, that the gold coin of the United Kingdom of Great Britain and Ireland should hold such weight and fineness as were prescribed in the then existing mint indenture, that is to say, that there should be nine hundred and thirty-four sovereigns and one ten-shilling piece contained in twenty pounds weight troy of standard gold, of the fineness at the trial of the same of twenty-two carats fine gold, and two carats of alloy in the pound weight troy; and further, as regards silver coin, that there should be sixty six shillings in every pound troy of standard silver of the fineness of eleven ounces two pennyweights of fine silver, and eighteen pennyweights of alloy in every pound weight troy.

SECOND SCHEDULE.

FIRST PART—ACTS PARTLY REPEALED.

For regulating and ascertaining the fineness of silver work. (2 Hen. 6, c. 17.[1]) So much as relates to the master of the mint.

An act to amend the acts relating to the standard weights and measures, and to the standard trial pieces of the coin of the realm. (29 and 30 Vict., c. 82.) Section thirteen.

SECOND PART—ACTS WHOLLY REPEALED.

An act for encouraging of coinage. (18 and 19 Cha. 2, c. 5.[2])

An act for ascertaining the rates of foreign coins in her Majesty's plantations in America. (6 Anne, c. 57.[3])

An act to explain and amend an act made in the fourth year of his present Majesty, intituled "An act to prevent paper bills of credit hereafter to be issued in any of His Majesty's colonies or plantations in America from being declared to be a legal tender in payments of money, and to prevent the legal tender of such bills as are now subsisting from being prolonged beyond the periods limited for calling in and sinking the same." (13 Geo. 3, c. 57.[4])

An act for applying a certain sum of money for calling in and recoining the deficient gold coin of this realm; and for regulating the manner of receiving the same at the Bank of England, and of taking there an account of the deficiency of the said coin and making satisfaction for the same; and for authorizing all persons to cut and deface all gold coin that shall not be allowed to be current by his Majesty's proclamation. (14 Geo. 3, c. 70.)

An act for regulating and ascertaining the weights to be made use of in weighing the gold and silver coin of this Kingdom. (14 Geo. 3, c. 92.)

An act for allowing the officer appointed to mark or stamp the weights to be made use of in weighing the gold and silver coin of this kingdom, in pursuance of an act made in the last session of Parliament, to take certain fees in the execution of his office. (15 Geo. 3, c. 30.)

An act to ascertain the salary of the master and worker of his Majesty's mint. (39 Geo. 3, c. 94.)

An act for the further prevention of the counterfeiting of silver tokens issued by the governor and company of the Bank of England called dollars, and of silver pieces issued and circulated by the said governor and company called tokens, and for the further prevention of frauds practiced by the imitation of the notes or bills of the said governor and company. (52 Geo. 3, c. 138.)

An act to prevent the issuing and circulating of pieces of gold and silver or other metal, usually called tokens, except such as are issued by the Banks of England and Ireland respectively. (52 Geo. 3, c. 157.)

An act to continue until six weeks after the commencement of the next session of Parliament an act passed in the last session of Parliament, intituled "An act to continue and amend an act of the present session, to prevent the issuing and circulating of pieces of gold and silver or other metal, usually called tokens, except such as are issued by the Banks of England and Ireland respectively." (54 Geo. 3, c. 4.)

An act to provide for a new silver coinage, and to regulate the currency of the gold and silver coin of this realm. (56 Geo. 3, c. 68.)

An act to prevent the issuing and circulating of pieces of copper or other metal usually called tokens. (57 Geo. 3, c. 46.)

An act to regulate certain offices, and abolish others in his Majesty's mints in England and Scotland respectively. (57 Geo. 3, c. 67.)

An act to prevent the further circulation of dollars and tokens issued by the governor and company of the Bank of England for the convenience of the public. (57 Geo. 3, c. 113.)

An act to provide for the assimilation of the currency and moneys of account throughout the United Kingdom of Great Britain and Ireland. (6 Geo. 4, c. 79.)

An act to prevent the further circulation of tokens issued by the governor and company of the Bank of Ireland for the convenience of the public, and for defraying the expense of exchanging such tokens. (6 Geo. 4, c. 98.)

An act to reduce the salary of the master and worker of his Majesty's mint. (1 and 2 Will. 4, c. 10.)

An act to amend several acts relating to the Royal mint. (7 Will. 4, and 1 Vict., c. 9.)

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[1] C. 14, in Ruffhead.
[2] 18 Cha. 2, in Ruffhead.
[3] C. 30, in Ruffhead.
[4] Repealed as to the whole of her Majesty's dominions upon the passing of this act.

An act to extend an act of the fifty-sixth year of King George the Third, for providing for a new silver coinage, and for regulating the currency of the gold and silver coin of this realm. (12 and 13 Vict., c. 41.)

An act to extend the enactments relating to the copper coin to coin of mixed metal. (22 and 23 Vict., c. 30.)

An act to enable her Majesty to declare gold coins to be issued from her Majesty's branch mint at Sidney, New South Wales, a legal tender for payments, and for other purposes relating thereto. (26 and 27 Vict., c. 74.)

An act to enable her Majesty to declare gold coins to be issued from her Majesty's colonial branch mints a legal tender for payments, and for other purposes relating thereto. (29 and 30 Vict., c. 65.)

MINTS AND ASSAY OFFICES.

RESOLUTION OF THE HOUSE OF REPRESENTATIVES, JUNE 4, 1870.

The following resolution was passed by the House of Representatives June 4, 1870:

"*Resolved*, That the Secretary of the Treasury be, and he is hereby, directed to furnish to this House copies of all correspondence between the Department and officers of the different mints and assay offices, and other persons, touching a bill and report submitted April twenty-fifth, eighteen hundred and seventy, by the Secretary of the Treasury to the Finance Committee of the Senate to revise the laws relative to the mints and assay offices, and coinage of the United States."

CORRESPONDENCE.

The Secretary of the Treasury to the House of Representatives.

TREASURY DEPARTMENT, *June 25, 1870.*

SIR: I have the honor to acknowledge the receipt of a resolution of the House of Representatives, under date of the 4th instant, directing the Secretary of the Treasury "to furnish this House copies of all correspondence between the department and officers of the different mints and assay offices, and other persons, touching a bill and report submitted April 25, 1870, by the Secretary of the Treasury to the Finance Committee of the Senate, to revise the law relative to the mints, assay offices, and coinage of the United States."

I inclose herewith a communication from the Deputy Comptroller of the Currency, transmitting, as far as practicable, copies of the correspondence called for by the resolution.

I have the honor to be, very respectfully,

GEO. S. BOUTWELL,
Secretary of the Treasury.

Hon. J. G. BLAINE,
Speaker of the House of Representatives.

TREASURY DEPARTMENT, OFFICE OF THE
COMPTROLLER OF THE CURRENCY,
Washington, June 25, 1870.

SIR: I inclose herewith, in accordance with the resolution of the House of Representatives of the 4th instant, copies of the correspondence of the department in reference to the bill revising the mint and coinage laws of the United States, which bill, with an accompanying report, was transmitted to the chairman of the Finance Committee of the Senate and the Speaker of the House of Representatives on the 25th of April, last.

In the month of December last, in accordance with your request, a rough draught of a bill was prepared, which contained in a concise form nearly all of the legislation now in force upon these subjects. This was printed, interspersed with interrogations and additional sections, for the purpose of calling forth an expression of opinion from those persons who were known to be intelligent upon such subjects. The correspondence herewith inclosed, dated prior to April 25, much of which was informal and unofficial, contains various criticisms upon the rough draught of the bill referred to. The notes of different officers of the Treasury Department, of gentlemen in San Francisco and other parts of the country, were written upon printed copies of this bill and returned in that form. These memoranda, which were carefully considered and in many cases adopted, it is impracticable to furnish in an intelligent manner without also transmitting copies of the bill itself. The remainder

of the correspondence is, however, so comprehensive that it is not considered necessary to transmit a copy of the bill first prepared. The notes of Robert Patterson, whose name has been familiar to all persons connected with the Mint at Philadelphia almost from its foundation, and who was himself connected with that institution for more than twenty years, was accompanied with a carefully prepared bill, the material of which has been freely used. Having received the correspondence above referred to, the bill now before Congress was prepared, Hon. H. R. Linderman, late Director of the Mint, having been associated with me in the work at your request.

Other correspondence on points germane to the bill in its present form is herewith inclosed. I also add, as pertinent to the subject, more recent correspondence in reference to the abrasion of coin, and the redemption of the bronze and nickel coinage. A communication from the chief coiner of the Mint on the subjects of wastage and tolerance, and a valuable paper from Mr. E. B. Elliott, of the Treasury Department, upon tolerance and other kindred subjects will command attention.

The English government has, during the present year, revised its mint laws, bringing together various orders in council, proclamations, regulations, and acts of Parliament which have heretofore existed only in a scattered form, introducing some important reforms. The present bill has been framed with a like purpose. The correspondence herewith transmitted will show with what care the work has been conducted, and the necessity for the reforms proposed.

The discussion of these subjects by the Congress of the United States, and the enactment of a law substantially like that proposed, will simplify our legislation on these subjects and render it more easily accessible, thus preparing the way for a more intelligent consideration and eventual adoption of a judicious system of international coinage.

A copy of the bill as finally prepared is also appended.

Respectfully submitted.

JNO. JAY KNOX,
Deputy Comptroller of the Currency.

Hon. GEORGE S. BOUTWELL,
Secretary of the Treasury.

CORRESPONDENCE PERTAINING TO THE PROPOSED REVISION OF THE MINT AND COINAGE LAWS OF THE UNITED STATES.

A.—Correspondence relative to the draught of a mint and coinage bill preliminary to the preparation of the revised bill, which was transmitted on the 25th of April, 1870, by the Secretary of the Treasury to the Senate of the United States.

B.—Correspondence relative to the bill which was transmitted by the Secretary of the Treasury to the Senate of the United States on the 25th day of April, 1870.

A.—*Correspondence relative to the draught of a mint and coinage bill preliminary to the preparation of the revised bill, which was transmitted on the 25th of April, 1870, by the Secretary of the Treasury to the Senate of the United States.*

Letter of the Director of the Mint.

MINT OF THE UNITED STATES,
Philadelphia, January 28, 1870.

SIR: Your letter of the 18th instant, inclosing "copy of a bill revising the laws relating to the mints," &c., with request to examine the bill carefully, in company with the other officers of the Mint, and return with suggestions, and noting upon it in writing such amendments as I may think desirable, has been received.

I have carefully examined the bill,[1] and also caused it to be examined by the officers of the Mint, and now return it with the result of such examination, which is the unanimous opinion of all the operative officers here.

First. As to the bill itself, generally. The existing minting laws are the result of the experience of many years, of men educated, scientific, and practical, and form a system as nearly perfect as any upon the statute books of our country. These laws, although passed at different times, were always in accordance with the exigencies of the occasion, and the progress of science. As a system, they might be *codified*, perhaps with some advantage, as some of their provisions are slightly conflicting, but in no manner impairing their efficiency; but the proposed bill by no means meets

[1] As the preliminary bill mentioned above is not printed with this correspondence, notes are inserted referring to the appropriate sections of the revised bill hereto appended.—J. J. K.

such adjustments, being a very defective codification which would soon demand new enactments to correct its imperfections. To alter and change a system so long and well established, its efficieny so fully demonstrated by its results, should require reasons, economical and governmental, stronger then first and hasty impressions, or individual convictions. I have no hesitation in affirming, and in this the officers agree, that all the difficulties that have existed, or now exist in the mints or assay offices (San Francisco or New York) have had their origin, not in the system itself, but in a disregard of its provisions, and the rules and regulations for the government of the Mint and branches, as prescribed by the Director, with the approval of the Secretary of the Treasury.

The proposed bill, so far as it is a copy of existing laws, is to be approved, but the alterations suggested, with very few exceptions, are *changes* without any improvement, nor do they provide any remedy for supposed defects beyond what now exists.

I will now notice the details of the bill wherein changes and modifications are suggested.

1. The main feature of the bill lies in the first section, the creation of a new officer, the director of the minting system of the United States, to have his office in the Treasury Department at Washington. Now, apart from all personal considerations, whoever may be the Director of the mints, &c., his office should not be in Washington, but in one of the principal mints of the United States. The Director, to be efficient and fitted for his duties, should know the daily operations of a mint from actual personal inspection, should see and know the details of its working, be personally familiar with all the requirements of its respective departments. This he could not do if his office is to be at Washington, however roving his commission may be. He must depend for all his information in relation to mints and assay offices upon the superintendents of these establishments, and any opinion he may form must come to him from those officers who are in daily contact with the actual operations of the mint. Therefore the proposed Director can do no more than transmit to the Secretary of the Treasury what the Secretary of the Treasury now receives direct, and without the intervention of such officer. There is no use and no advantage, then, in the proposed directorship. It would be the creation of a new office not required by any consideration of public interest, and consequently the useless expenditure of government funds.

Again, casual visits to the mints and assay offices cannot possibly enable the Director to gather as certain information, or form as reliable opinions upon practical questions or operations, as those resulting from the daily observations of an officer in the mint of such operations, and carried on for a long time. If the superintendents are men of ability and integrity, (and none other should be appointed,) he (the Director) could not alter the information given him by them, nor ought he to risk giving different opinions on practical questions, because he is necessarily, by absence and want of familiarity with their working, not qualified to hazard conjectural opinions at variance with those based wholly on practice. Either, therefore, the proposed Director will transmit the information and opinions he receives from the superintendents, *unaltered* or *modified*. If unaltered, then he is a useless intermediate between the superintendents and the Secretary of the Treasury; if *altered*, he will create confusion and trouble arising from his interference in matters of which he has practically no knowledge.

The ruling thought of the proposed bill, a directorship at Washington, will be more fully and usefully accomplished, and by a far less outlay of the public money, by a *clerkship* in the Treasury Department, in the nature of a *registrar*, to receive all the documents transmitted from the Director, as now, and superintendents of the mints and assay offices to the Secretary of the Treasury, to register, file and preserve the same, so as to be accessible to all who may have the right to examine them, and conduct the mint correspondence, &c., under the direction of the Secretary of the Treasury; and by a COMPTROLLER OF MINT ACCOUNTS, whose special duty it shall be to examine, audit, and adjust all the accounts of every kind, of the mint, branches, and assay offices, promptly and without the delay now attending those examinations. These appointments, and the assignment of duty under them by the Secretary of the Treasury, and under his control, would meet all the necessities of the case, and efficiently supply all, and more than all, the proposed directorship could accomplish.

It does not, therefore, appear to us that the public service is to be benefited by removing the office of Director to Washington. [See sections 1 and 2 of revised bill hereto appended.]

Section 2. The expression "Engraver of the Mint at Philadelphia," does not say that he is to be the sole engraver, as now, for all the mints, although that, we presume, is what is intended. This section virtually restores to the Mint at Philadelphia, and recognizes the primary position it has always held, but which the first section would take away. The historical and traditional character of the parent Mint should not be impaired by hasty legislation. [See section 3 of revised bill hereto appended.]

Section 7. The increase of the amount in the surety bonds would embarrass some worthy holders of office, and do nothing to promote security. Integrity of character in the officer is the true security of the government; but when bonds are required, they should have some relation to the character of the office and the nature of the duties to be performed.

The superintendent handles no money, and has no right to receive, hold, or disburse any of the funds of the mints, but is required to give bond in $50,000. If a bond is required at all, it should be in a less amount than those officers who receive and control large amounts of coin, bullion, &c. The assayer handles no coin or bullion, only a few small bits of metal at a time, and yet, under this bill, must give bond in $50,000, while the treasurers, who have the greatest responsibility, give no security.

This, perhaps, was an oversight, but it furnishes some evidence of the defective character of the provisions of the bill now under examination. All the defalcations that have taken place in this Mint, two or three in number, have been by the *clerks* of the *treasurer* having custody of funds or bullion. As regards the officers, and the nature and amount of security, the old law is the better. [See section 11 of revised bill.]

Section 9. The limits of deviation from standard fineness are left out. If an absolute fineness of 900 gold or silver is required, the operations of the mints must cease, as such perfection is unattainable without almost infinite care and labor; it is, in fact, impracticable. The present legal allowance is right, and should be retained. [See section 36 of revised bill.]

Section 11. The reduction of the weight of the whole dollar is approved, and was recommended in my annual report of 1861, (page 10.) [See section 15 of revised bill.]

Section 18. The proposed modifications of existing regulations in regard to wastage cannot be justified by practical knowledge and experience, especially in regard to the settlement of the melter and refiner.

The department of melter and refiner necessarily becomes the sink of all losses that might perchance occur, and experience for a long series of years has shown that while the average wastage has been small, yet in some years the wastage has surpassed one-thousandth, (which section 18 now proposes as the greatest limit allowable,) and that, too, in spite of extreme care and precaution. Such a case occurred in 1863 in this Mint, and, after a thorough investigation, it was found that an unusual amount of volatilization had taken place, in consequence of the unlooked-for presence of arsenic in Colorado placer gold. Another year showed a surplus of gold, for which, of course, the officer (melter and refiner) would get no credit. If the proposed reduction of allowance were made, the melter and refiner, however careful and skillful, and whatever his integrity, would have been obliged to refund the loss above one-thousandth, and yet would be allowed no credit for his surplus in another year.

The truth is that gold and silver cannot be worked with acids and fluxing and fire and handling, without some loss. The marvel is that so extremely minute a proportion of loss takes place as mint accounts on an average witness.

We feel confident that if the provisions of this section become a law, no person of strict integrity and of the utmost skill and experience, and thoroughly knowing his dangers and risks, could accept the office of melter and refiner. The chief coiner is by no means as liable to the wastage as the melter and refiner is. The present law on this subject should not be changed. [See section 44 of revised bill hereto appended.]

Section 25. The recoining of gold and silver by the government. Observe the operation of this singular provision. A depositor of gold, more cunning than honest, is paid in new coins; he takes them away, sweats or files off a few grains, brings them back and demands pieces of full weight; goes and repeats the same work, and the law takes care of him. Or, he may take old and worn pieces, punch holes in them, and then get new coins for them, at a serious loss to government, and gain to himself. This would be a better business than counterfeiting, and would be legal. We may add, no nation keeps up its *gold* coin at the public expense. The case is different with *silver*, on which there is a profit. [See correspondence relative to abrasion of coin, p 80, hereto appended.]

Between sections 33 and 34 a reduction of the coinage charge to one-fourth per cent. would be proper; its total abolition would not be very objectionable.

Sections 35, 36, and 37. These sections embody the provisions of the copper-nickel bill, providing for a new one, three, and five-cent coin, presented to and not passed by the last Congress. There exists no necessity, no consideration of public interest or convenience for a change in the present bronze, copper, and nickel coinage, and the substitution of that proposed in these sections. In appearance, in size, weight, and artistic device, the present is fully equal to the proposed base coinage; and as regards the bronze cent in comparison with the nickel cent suggested, it is superior in every pretension, economy, convenience, easy recognition, &c. The copper-nickel cent would be a small, inconvenient coin, so small as to be almost useless; and the cost of the production, after a careful calculation by some of the most experienced officers of the Mint, would be equal to its nominal value in *gold*.

It costs as much (material excepted) to make a copper-nickel cent as a gold double-eagle.

If every consideration of economy and a desire to prevent useless waste of the public money condemns the authorizing of the coinage of a nickel-copper one-cent piece, why introduce a *three* and *five*-cent piece of the same metals and proportions, when the existing coins of the same denominations are equal, if not superior, to the proposed.

Then, again, the proposition to abolish the *silver* five-cent piece, in aid of the nickel coin, is one that would be by common consent condemned, particularly in a country like ours, abounding in silver ores, and near the day of the resumption of specie payments. We cannot advise this change. [See sections 30, 31, and 32 of revised bill.]

Section 39. This provides for the redemption of the copper, bronze, and copper-nickel, except the three and five-cent pieces, whose redemption is already provided for, and in progress of execution.

This provision we deem unnecessary, and not demanded by the public, for whose convenience alone "as change" these coins were made.

The provisions of this section, if enacted into a law, in connection with sections 35, 36, and 37, would withdraw from the Treasury a large amount of money. This section virtually and practically authorizes the redemption of all the base coinage now in circulation, and this redemption to be in the "national currency." How is this effected? Simply this way, and we have examples of a similar kind of redemption almost every day:

The section first proposes to redeem at par, at the Mint in Philadelphia, every coin of copper, bronze, or nickel now in circulation, by exchanging them for the new coin authorized by the bill. The exchange is made, the new three and five-cent pieces are received by the depositor, who immediately, under the other provisions of the section requiring the United States Treasurer and assistant treasurer to redeem such new coin in "national currency," &c., when presented in sums of not less than $50, carries his new coin to the Treasurer, and demands its redemption in the national currency.

Now, when it is known that up to June 30, 1869, the copper, bronze, and nickel coinage of the Mint amounted to $10,407,603 55; that less than one million has been redeemed, and that, making due allowance for loss or destruction of coins since issue, there is still in existence not less than eight millions, the question of redemption at this time, and in view of the size of our national debt, becomes important. As "these coins were issued for the convenience of the people," with no promise proposed or expectation of redemption; that the public are satisfied with these coins; that their redemption would largely increase our interest-paying debt, the necessity or advantage, public or private, of such redemption, at this time, does not clearly appear. It may be well hereafter, not now. [See section 33 of revised bill; also correspondence relative to redemption of minor coinage, p. 84, hereto appended.]

Sections 44 and 45. These sections relate to the union of the office of superintendent and treasurer in the assay office, New York. The propriety of such a merger of office is more than doubtful; it is wrong in principle, and, when possible, should be avoided. The drawer and the payer of the warrants should never be the same person. The merger now suggested destroys a most salutary check, and necessary, as recent events have shown. The proposed creation of the office of assistant superintendent cannot and will not remove the force of the objection to the merger of the offices named. Such additional officer would only increase the number of officers and the expenses of the assay office, without any corresponding benefit, real or imaginary. [See sections 26 and 55 of revised bill.]

Section 54. The separation of the offices of treasurer of the Mint and assistant treasurer at Philadelphia and San Francisco, is a wise and proper measure, particularly in Philadelphia, where the places of business are so widely separated. [See section 3 of revised bill.]

On the margin of the bill we have noticed sundry amendments, some verbal, others important, as also some suggestions which are more fully set forth in this communication.

As already stated, most of the difficulties that have arisen can be traced directly to the failure of the branch mints and assay office to recognize the authority of the Director of the Mint and his official relations to them.

Under any circumstances the security of the government must depend mainly upon the high character of the appointees for intelligence, integrity, and executive efficiency; the proper subordination, under the law, of the branches and assay offices to the parent Mint, and the promptness with which the accounts are audited, thus insuring the instant detection of any irregularities that may occur, whether inadvertently or otherwise.

We have thus given our views plainly and from a conviction of official duty, with no other desire or intention than to maintain the high character of the minting system of our country, and promote the true interests of government and people.

This communication has been read to and approved by all the operative officers of this Mint as a whole; in a single minor point there is some variance of opinion on the part of one officer.

Very respectfully, yours,

JAS. POLLOCK,
Director.

Hon. GEORGE S. BOUTWELL,
Secretary of the Treasury, Washington, D. C.

Robert Patterson to Mr. Knox.

NO. 1825 DE LANCEY PLACE,
Philadelphia, February 10, 1870.

DEAR SIR: I should be glad to learn from you whether you consider your task limited to a revision and consolidation of the present mint laws; or do you feel justified in going further and introducing amendments and improvements? In general, you seem to have proceeded with conservative caution; yet, in some cases, you overstep the line, and generally with advantage. Perhaps I might be disposed to go still further. Not to go into details, I make one suggestion. By the draught you abolish the combination of treasurer and assistant treasurer, but you retain a treasurer of the mint. Why should not the superintendent be also treasurer? The offices were always combined in the little branch mints, and I see no special reason why they should be separated in any of the mints. You combine them in the assay office at New York, and properly so. An objection to the bill that you must expect to have made, will be that it multiplies officers and salaries—a Director with official helps, and two treasurers or assistant treasurers, now holding offices in combination. If these treasurers are abolished and their duties devolved upon superintendents the expenses will be diminished materially. It might be judicious to proceed still further in this consolidation. I have always thought that the offices of coiner and melter and refiner might be conveniently combined. If this were done a great deal of detail and inconvenient *friction* might be avoided. Instead of bullion being delivered to the melter for his operations, then back again to the treasurer, then to the coiner, and again back to the treasurer, part in coin, and part in clippings, to be again returned to the melter and refiner, it would be, I think, an improvement if we had but a single officer to receive bullion from the treasurer, and carry it through all the operations, melting, refining, casting into ingots, and being finally discharged only by the delivery of coins or stamped bars into the treasury. Such an officer might be called melter and coiner, or coiner simply. If it were not desirable to go this length, a clause might be introduced authorizing the offices of melter and refiner and coiner to be filled by one person, at the recommendation of the Director, the compensation not to be increased. To sum up, it is my opinion that the mint organization should be threefold: 1. An officer to receive and pay for bullion; 2. An officer to assay it; 3. An officer to manufacture it.

Address me at 329 Chestnut street.

Yours, sincerely,

R. PATTERSON.

JOHN J. KNOX, Esq., *Deputy Comptroller.*

Mr. Patterson to Mr. Knox.

FIDELITY INSURANCE, TRUST AND SAFE DEPOSIT COMPANY,
329 and 331 Chestnut street, Philadelphia, Pa., March 5, 1870.

DEAR SIR: I have gone carefully over your printed draught of a bill revising the laws relative to the mints, assay offices, and coinage, and now return it, with such modifications as seem to me desirable. You will perceive that I have proceeded on the theory of official organization indicated in my letter of the 10th ultimo. I am satisfied that in principle this is correct, but will be quite content, on personal grounds, that the offices of melter and refiner and coiner be kept distinct, as under present laws. My "notes" on the revised bill are intended for yourself, as an expert familiar with the general subject. They will be unintelligible, I fear, to those who have not given some special attention to our mint organization and practice.

The department and the country will owe you thanks for the intelligent and laborious attention you have given to this business, and if the bill should pass, I trust you will find your reward in the gratitude of all who have an interest in the effective working of our mint establishments.

Very sincerely your friend,

ROBERT PATTERSON.

JOHN J. KNOX, Esq.,
Deputy Comptroller of Currency, Washington, D. C.

NOTES ON THE MINT BILL.

By way of introduction to the bill, in the form in which it is now presented, it may be stated that the theory on which it is proposed to establish the official organization of the working mints is the following:

OFFICE OF SUPERINTENDENT AND TREASURER COMBINED.

1. There is an officer to represent all transactions between the mint and the public, with whom all deposits are made, and by whom they are paid for; the organ with whom all correspondence and business are conducted, and to whom is given all such supervision of the operations of the mint as is necessary to its effective working in meeting the public demands. This officer is the *superintendent*, acting also as treasurer. [See section 3 of revised bill appended hereto.]

THE ASSAYER.

2. An officer on whom is devolved the duty of determining, by proper scientific methods, the value of bullion, for settlement with depositors and the officers. This officer is the assayer.

OFFICE OF MELTER AND REFINER AND COINER COMBINED.

3. An officer to carry out the metallurgic and mechanical operations necessary to furnish bars and coins for the settlements to be made by the superintendents with the depositors. This officer assumes the functions heretofore devolved upon the melter and refiner and the coiner. His title may be *melter and coiner*.

This form of organization appears to be a natural one, and likely to facilitate an effective and economical working of the establishments. It dispenses with two officers by a consolidation of duties. The superintendent, in addition to the ordinary duties of supervision implied by his title, and heretofore devolved upon him, (or upon the director acting as such,) becomes also the fiscal agent or treasurer. No sufficient reason can be given in theory, nor could any be found in practice, why these duties should not be consolidated.

THE TREASURER NOT NECESSARY AS A CHECK ON THE SUPERINTENDENT.

If it should be contended that a superintendent and treasurer must be separate officers because the former might impose a check upon the latter, there ought, for the same reason, to be a superintendent imposed over the United States Treasurer at New York, or at Washington, or at Boston, or over collectors of internal revenues. Such a duplication of officers for such a purpose is useless and expensive. At the mints, in particular, where there are assayers to determine all questions of value, and depositors watchful for their own interests, the officer acting as treasurer is under a constant supervision which he cannot escape. Nor is there anything in such duty inconsistent with the general control of the mint establishment given to the superintendent. The officer who is more particularly brought in contact with the public is the one who can best know the public wants and best direct the energies of the establishment to meeting those wants. This line of argument need not be enlarged on, except to add that already, in the organization of the smaller branch mints, the duties of superintendent and treasurer have been united in one officer, with great advantage and without objection, and there seems to be no reason why the plan should not be extended to the larger establishments. (See sections 4 and 26 of revised bill hereto appended.

ADVANTAGES OF CONSOLIDATING THE OFFICES OF MELTER AND REFINER AND COINER.

Again, the two offices of melter and refiner and coiner are consolidated in one. When bullion, after having its value determined, leaves the hands of the superintendent (or treasurer) to be manufactured, it seems proper that the operations necessary for that end should be under one control. At present the course of proceeding is complex. In the hands of the melter and refiner bullion is melted, refined, and put into fine bars or into ingots, and returned to the treasurer. If in ingots, these are then delivered to the coiner, who manufactures coins therefrom and returns these, with the clippings unmanufactured, to the treasurer. The clippings again go to the melter and refiner, are again melted, again returned to the treasurer, again delivered to the coiner, and so on. It would be simpler and more convenient if a single manufacturing officer treated the bullion by all the metallurgic and mechanical applications necessary to prepare it for final delivery in a form necessary for payments. There would be incidental practical advantages in this arrangement. At present there are two corps of workmen under control of two officers, and those

of one officer cannot be detailed to assist the other without special favor, although this might often be convenient. There would be an economy in having the whole force under one control. Again, a melter and refiner, negligent or unskilled, by the imperfect manner in which the ingots are prepared, gives great annoyance to the coiner in the rolling and working of the metal, which may be, and sometimes is, a subject of complaint. If the officer who coined had also the control of the melting, he could have no cause to complain, except of himself.

It may be added that a consolidation of officers such as is proposed has, in this case, also been practiced at the small branch mints with advantage, where the positions of coiner, and melter and refiner were held by one person. Of course, in a larger establishment a manufacturing officer filling such duties should be provided with skilled assistants to take charge, in subordination to him, of the departments into which the business would naturally divide itself, namely, the melting and refining and mechanical.

THE OFFICE OF DIRECTOR SHOULD BE AT THE SEAT OF GOVERNMENT.

Such being the organization of the single mint or assay office, as a manufacturing establishment, it is proper that where many such institutions are established, a general oversight of the whole should be vested in some one officer as director. Heretofore this supervision has been devolved upon the officer at the head of the Mint in Philadelphia. The advantages of this arrangement are its economy, and the experience which must be given by daily practical observations of minting operations. The disadvantages, however, seem to preponderate. First. An officer whose duty fixes him at one establishment cannot be spared for the visitation to other establishments, which, for any effective supervision, ought periodically to be made. Second. The Mint at Philadelphia is itself one of the institutions requiring supervision, and the officer at the head of it, if in fault, could not be expected to report upon his own shortcomings. Third. An officer at the head of one establishment is apt to have his views narrowed to the wants and standing of that establishment alone. Instead of looking at the institutions for coinage as a whole, he will be apt to think too much of the business and success of the particular one over which he is placed in more special charge, even, perhaps, being wakened to jealousy at the growing importance of subordinate establishments. Fourth. The mints and assay offices being under the control of the Treasury Department, there are disadvantages in the officer having general direction being located at a distance. The Director of the mints should be fixed at the seat of government, for the same reasons of propriety and convenience as have located there already the directing officers of other establishments distributed through different parts of the country. The various assistant treasuries, post offices, pension agencies, &c., have their heads at Washington, without its being ever thought proper or possible to transfer them elsewhere. A Director of the mints and assay offices, located at the seat of government, if possessed of the proper qualifications, could give all the needful supervision now imposed upon the Director of the Mint at Philadelphia, with special advantages for the work not likely to be secured by the present arrangement. The duty of visitation imposed upon him is an important aid to any effective oversight, and this *he* could perform, while it would not be practicable for one in charge of a working mint. Being himself without direct interest in the patronage of the mints, he could revise, in an economical and yet impartial spirit, the estimates for those establishments, and correct all tendency to extravagance. From the opportunities afforded him of intercourse with representatives from all parts of the country, he would be in the most favorable position for discussing and forming conclusions respecting all forms or modes of coinage, and the production, manufacture, and distribution of the precious metals. [See section 1 of revised bill hereto appended.]

Dismissing any further presentation of these general views, a few notes will be added in explanation of certain details in the bill. The portions to be commented on are noted by the letters, &c., in the margin.

ASSAYER A CHECK ON SUPERINTENDENT.

A.—The old mint certificate here referred to has fallen into disuse. It is proper, under the proposed organization, that it should be practically revised, and as a check upon the superintendent the assayer ought to verify and countersign the same. These certificates, duly receipted for by the owners, become the superintendent's vouchers of payments. [See section 26 of revised bill.]

OPERATIVE OFFICERS SHOULD NOMINATE SUBORDINATES.

B.—The operative officers, if they are to be held responsible at all for the workmen in their charge, should not have imposed upon them any such without their request and consent. At present the superintendent (who gives no bonds and has no

responsibility) chooses the men to whom the operative officers must confide the treasure for which *they* have given security and are held responsible. By the amendment proposed, the superintendent appoints only on the recommendation and nomination of the operative officer, and a general power of approval is also given to the Director. [See section 4 of revised bill.]

DISTINGUISHED ARTISTS MAY BE EMPLOYED TO PREPARE DEVICES, MODELS, ETC., FOR NEW COINS.

C.—The duties of the engraver are defined in a manner somewhat different from those of the old Mint law. In the progress of art the whole system of preparing *working* dies for coins has been changed, and has become mechanical instead of demanding the graver's tool. When *new devices* are required the necessity of a new or original die arises, and a high style of art is required. The engraver who may be at the Mint is not, necessarily, the person best qualified for such a work. In France, the government, when a new coin is to be issued, selects the most appropriate device and die from a *concours*, or competitive trial, in which the best artists are requested to participate. Perhaps it is to this cause we may attribute the perfection reached in the coinage of that country. Without insisting that this is the best plan, it is surely judicious to change the present law, which gives to the one person, who may happen to be engraver at the Mint, a monopoly in preparing new devices and dies where new coins or changes of old become expedient. [See section 8 of revised bill.]

DIFFERENCE IN AMOUNT OF BONDS.

D.—The responsibilities of the officers being very different, the rates of security should be so. The assayer, for example, holds no treasure in his custody. [See section 11 of revised bill.]

SALARIES PAYABLE MONTHLY ONLY.

E.—This amendment, prohibiting payments of salaries and wages in advance, would impose some check on the hand-to-mouth style of living, which is encouraged by permitting advances, so that by pay-day scarcely a cent remains unconsumed. [See section 12 of revised bill hereto appended.]

SILVER DOLLAR, HALF DIME, AND THREE-CENT PIECE DISCONTINUED—COINS LESS THAN DIME OF COPPER-NICKEL LEGAL TENDER—ONE-CENT PIECE OF ONE GRAM IN WEIGHT.

The silver dollar, half dime, and three-cent piece are dispensed with by this amendment. Gold becomes the standard money, of which the gold dollar is the unit. Silver is subsidiary, embracing coins from the dime to half dollar; coins less than the dime are of copper-nickel. The legal tender is limited to the necessities of the case; not more than a dollar for such silver, or fifteen cents for the nickels.

G.—In the printed draught the cent piece is fixed at one and a half gram, while its weight, if proportioned to the higher nickel coins, should be one gram, at which we have fixed it. There may be practical difficulties in coining so light a piece, but if possible they ought to be overcome rather than admit so incongruous a disproportion. [See sections 15, 16, 17, and 18 of revised bill.]

DISKS OF OVER ONE HUNDRED DOLLARS SHOULD BE AUTHORIZED.

H.—The old law admitted of the formation of disks as well as ingots, and it is desirable that the option should remain. Large disks, prepared of fine metal, of a definite weight, struck like medals, might prove useful. A five-ounce gold disk—over $100—if practicable to manufacture, would be an aid to commercial exchanges. [See section 20 of revised bill.]

COINAGE CHARGE SHOULD BE RETAINED.

I.—The present one-half per cent. coinage charge is retained. The only mint where coinage is free is the British, and the political economists and statesmen are so unanimous in recommending a seigniorage that the Chancellor of the Exchequer proposes to introduce it into Great Britain. It would be strange if we, by retrograding, while she is advancing, should become the sole exemplars of an exploded system. It would, in view of an *international* coinage, be especially inopportune to abandon a seigniorage, for it is recognized on all hands that under such a code there must be a tax, and a uniform tax for coinage. [See section 25 of revised bill; also, English coinage act, 1870, section 8, Senate Mis. Doc 132, 41st Congress, 2d session, page 34.]

SILVER COIN SHOULD ONLY BE ISSUED IN EXCHANGE FOR GOLD AT PAR—REDUNDANCY OF ALL MINOR COINAGE SHOULD BE PREVENTED.

K.—The present mint laws are express that no silver bullion shall be deposited except that purchased by the Treasurer, and there is no way provided by which individuals can secure silver coin except by bringing gold coin for it, and exchanging at par. This plan was essential to keep silver coin on a par with gold. If the law had been carried out, in letter and spirit, we should never have seen the mints used to manufacture silver coin at all, during the time of depreciated paper currency. This coin was nevertheless issued in payment of deposits, becoming a nuisance to California and to our Canadian neighbors, and imposing a useless and unlawful labor upon the mints. In the present revision it is hoped the law is made so plain that it cannot be misunderstood. It ought never to be forgotten that where a government issues coin—silver, nickel, or copper—at a reduced and artificial value, it must retain absolute control of the issues, or depreciation and great disorders will be the consequence. To leave to individual holders of bullion, in such cases, to glut the market for their own benefit is a fatal error. [See sections 27, 28, and 29 of revised bill; also, correspondence on necessity of redemption of minor coinage, page 84, hereto appended.]

THE CONSIDERATION OF A SECTION PROVIDING FOR ABRADED COINS POSTPONED.

L.—A clause in the original draught for the redemption of abraded coins is purposely omitted. It is an extremely difficult question, and may wait a more mature consideration. If an international coinage is adopted, some plan of recoinage and redemption might accompany the proposal. [See correspondence on abrasion of coin, page 80.]

TOLERANCE OF FINENESS AND WEIGHT.

M.—In practice, coins are delivered at the Mint in quantities, by drafts of a value different from those defined for the deviations of the old law; by the revise the admitted deviations are adapted to the drafts as actually practiced. [See sections 36, 38, and 39 of revised bill.]

WASTAGE.

N.—An examination of the settlements of copper-nickel accounts for years past would furnish the basis for filling the blank here, for the allowed wastage in that material.

[The bill accompanying Mr. Patterson's notes contained the following provisions relative to wastage: *And provided also*, That the amount of wastage shall not exceed one-thousandth of the whole amount of gold, one and one-half-thousandth of the silver, and ——— hundredths of the copper and nickel bullion delivered to him since last annual settlement: *Provided*, That all copper used in the alloy of gold and silver bullion shall be separately charged to the melter and coiner, and accounted for by him.] [See section 44 of revised bill.]

ANNUAL ASSAY AT THE MINT.

O.—The old law required the presence of the *officers* of the Mint at the annual assay—a provision quite useless. For some reasons it might be more correct for them to be absent, in order that the examination might be an absolutely independent one. The presence of the Director is required as sufficient. Such other officers will attend—the assayers especially—as may be invited to assist. [See section 49 of revised bill.]

OBJECTION TO STRIKING MEDALS AT THE MINT.

P.—It is alleged by outside parties, perhaps with injustice, that the superior facilities of the Mint in striking medals, &c., are used so as to break up all private business and competition. [See section 53 of revised bill.]

REFORM IN THE MANUFACTURE OF BASE METAL COINAGE—SPECIFIC APPROPRIATIONS SHOULD BE MADE.

Q.—It is the right and duty of Congress to retain the control over the expenditures of all government institutions. This it can only do through the appropriations. By the present law as to minor coinage, as it is construed, all the expenses of that coinage, in wages and materials, are deducted from the profits before they are paid into the treasury. A large corps of workmen are thus kept employed for whom Congress makes no appropriation. The revised clause corrects this error and leaves no room for misapprehension. [See section 30 of revised bill hereto appended.]

THE ISSUE OF BULLION CERTIFICATES NOW AUTHORIZED IN THE ASSAY OFFICE AT NEW YORK TO BE DISCONTINUED.

R.—A clause giving to the assay office certificate a privilege as money for sixty days is left out. It will be best not to introduce a new gold treasury note, especially one running for all sorts of fractional sums and not protected by suitable guards of engraving. At present, any depositor may take his gold and procure gold notes for the same from the Treasury, better adapted to the purpose than such assay office certificates could be. [Section referred to omitted in revised bill.]

PENAL OFFENSE FOR ANY ONE TO TAMPER WITH ANY BULLION OR OTHER TREASURE DEPOSITED AT THE MINT.

S.—This is meant to prevent the escape of persons committing peculation and pleading that they were not legally placed in charge of the moneys. [See sections 64, 65, 66, and 67 of revised bill.]

BILL TO GO INTO EFFECT TWO MONTHS AFTER PASSAGE—SALARY OF ASSISTANT TREASURER.

T.—Some time should be admitted for reorganization, filing bonds, &c., and a delay of two months seems not too much for the passing from the old system to the new.

The salary of the assistant treasurer would have to be defined and increased. That had better not, perhaps, be in the Mint bill, but supplemental. It ought not, at all events, to be overlooked. [See section 68 of revised bill.]

R. P.

THE FIDELITY INSURANCE, TRUST AND SAFE DEPOSIT COMPANY,
329 and 331 Chestnut street, Philadelphia, Pa., March 8, 1870.

DEAR SIR: Since sending on the Mint bill it occurs to me that I made no explanation of an amendment which I introduced in regard to ascertaining the profits on silver coinage. By the present method (which was retained in the revised bill) the profits were computed as the difference between the coin, by tale, manufactured at the reduced weight, and that which would have been realized in silver *dollars* of the old weight. For instance, the weight which could be coined into 1,000 silver dollars would realize $1,074 22 in silver coins less than the dollar.

COMPUTATION OF SILVER COINAGE PROFITS.

The difference is called profit, and so credited to the silver profit and loss account. But if the silver dollar is abolished, (as seems to be agreed on, and properly so,) a new normal or standard must be agreed on to estimate profit. This will naturally be the difference between the *cost* and the amount realized in the *coins by tale.* Say, for example, that the bullion coined, as above, into $1,074 22, had cost $1 21 per ounce, or $1,039 84; the profit to be credited will be $34 38. It may be added that this plan, while a necessity under the change proposed, corresponds to the facts and is more accurate, while the other is artificial and involves counter entries to secure accuracy. The rule as to ascertaining profits on the minor (copper-nickel) coinage will be the same.

NICKEL-COPPER ONE-CENT PIECES.

Since my notes were forwarded I learn that the unconformable weight which had been fixed for the cent, (one and a half gram, while the three-cent was three grams, and five-cent was five grams,) was recommended by a supposed practical necessity. I am aware that the nickel alloy is an intractable material, and that a coin so small as one gram, which theoretical considerations would recommend, is difficult to manufacture. If pronounced *impracticable* of course nothing more can be said, but if simply difficult I suggest that this fact tends to protect the coin from the hazards of false mintage. If found difficult to coin in a mint, with all its appliances to facilitate the work, it would become impossible of imitation by the rude methods of counterfeiters. I add, further, as bearing upon the point of weight, that the silver three-cent piece weighs but 11.52 grains troy, while the one-cent nickel piece, at its weight of one gram weighs 15.43 grains troy, or over one-third more.

Yours, very truly,

R. PATTERSON.

JOHN J. KNOX, Esq., *Treasury Department, Washington.*

Franklin Peale, formerly melter and refiner and chief coiner of the Mint at Philadelphia, to Mr. Knox.

1131 GIRARD STREET, PHILADELPHIA,
January 25, 1870.

MY DEAR SIR: Both of your letters have been received; the direction of the first to Burk street was corrected by the carriers of the post office, after the delay of a few hours.

I beg leave to thank you for the favor of sending me the bill. It is natural, after so many years of service and so much labor in the various departments of the Mint, that it should occupy so much of my attention, and to the proper organization and conduct of which I can never, as a patriot and lover of my country, be indifferent.

Your request of examination shall be complied with immediately, but I regret that so short a time should be allowed on a matter on which there is so much to be said, and for such careful consideration of details as are requisite.

With sentiments of the highest esteem, I am yours,

FRANKLIN PEALE.

JOHN JAY KNOX, Esq.,
Deputy Comptroller, &c.

PHILADELPHIA, *January 31, 1870.*

MY DEAR SIR: It has been impossible to give the attention to a proper consideration of the bill which you did me the honor to submit for my examination, and to write the result within the limited period designated in your letter. I shall have the pleasure, in a day or two, of transmitting my remarks. When they are received, you will observe that I have been candid and unreserved.

The origin of the bill is unknown to me, and I have no other feeling or desire than to make, or rather aid in making, the department of the Mint as perfect in all respects as possible. Such was my ambition when in the responsibility of office; how far, the machinery and processes speak for themselves, and are recognized by all capable of judgment, both at home and abroad.

I trust my remarks may be found acceptable, and remain, with sentiments of esteem,

Your obedient servant and friend,

FRANKLIN PEALE.

JOHN JAY KNOX, Esq.,
Deputy Comptroller

REMARKS ON A BILL REVISING THE LAWS RELATIVE TO THE MINTS, ASSAY OFFICES, AND COINAGE OF THE UNITED STATES.

On Section 1:

OFFICE OF DIRECTOR OF THE MINT SHOULD BE AT WASHINGTON.

It is desirable that there should be a Director of the mints, whose office may be at Washington, or readily accessible to the heads of the departments, of which he should be a member.

The incumbent should be selected from among the most enlightened, scientific, and moral men of the country; such as have occupied the position of Director in the earlier history of the Mint, Rittenhouse, the elder Patterson, and Professor R. M. Patterson; and in England, Herschel, Graham, and others. In Great Britain the master of the mint, as he is called, is a high state officer; the deputy master, as he is called, is his representative, and is in immediate charge.

The office should be entirely free from all partisan influences; the degrading effects of what has been called, very wrongly, politics, better named party chicanery, is too baneful in its habits and tendencies to be tolerated in a matter so sacred and requiring such purity and confidence as the national money and its manufacture. This remark applies, more or less impressively, to every department of mint transactions and incumbencies.

With such a Director, and such freedom from one of the greatest evils of the present political habits of our country, the creation of the office of Director, as contemplated by this bill, would be very judicious; with anything less, it would be only an aggravation of the evil under which we now suffer.

Section 2:

ENGRAVER OR DIE-SINKER.

The term engraver has led to error and evil influences in the nomenclature of the Mint of the United States. The services required are those of a die-sinker, not of an engraver; nevertheless, it has been so long in use that its abandonment may be

difficult. Other remarks, of an explanatory character, will be made on the seventh article of this section, and in section 33.

Section 3, article second:

OPERATIVE OFFICERS SHOULD NOMINATE THEIR SUBORDINATES.

The fourth line contains the provision for the employment of workmen, which requires consideration if not modification. The melter and refiner, in the fifth article, and the coiner, in the sixth article, are responsible for all the bullion charged to them, and yet have no control of the workmen in their departments, either of appointment or discharge; while the treasurer, in article third, has the appointment power, subject to the approval of the superintendent, as it should be in all cases. The want of control in the departments of the melter and refiner, and chief coiner, has been one of the evils—not to use a stronger expression—of the mint laws of the past, and is embarrassing and unjust to those officers. [See section 4 of revised bill hereto appended.]

Section 3:

ONE MINT OF THE UNITED STATES SUFFICIENT.

The multiplication of mints is an unnecessary error; *one* is sufficient for any country. A single one for the civilized world would be best; but that being impossible or utopian, the fewer there are the better.

It is less costly to transport coin and bullion than to erect, furnish, and officer mints at either remote or near points; and the liability to error, fraud, and departure from uniformity, is multiplied in proportion to the number of such organizations.

The case of California may be exceptional, as the mint of Calcutta is with regard to Great Britain. Its distance, and being the center of bullion-yielding districts, may authorize such an establishment in such a situation; nevertheless, it is, even under the circumstances, a question of true policy.

Seventh article: The word "engraved" is not appropriate, as will be seen on reference to remarks in sections 2 and 33, and should be struck out.

Section —. There is a grave omission of a section providing for the assay of ingots, and the necessary allowances of deviation from the legal standard of nine hundred-thousandths, of two-thousandths above and below, for gold, and three-thousandths above and below, for silver. [See section 36 of revised bill.]

Section 7 requires securities from the melter and refiner, and coiner, but as they have not the control of the operatives, by appointment or discharge, and through whose hands the bullion and coins must pass and be manipulated, they should not be held responsible for any loss sustained by the incompetency or fraud of workmen.

Section 11:

WEIGHT OF SILVER COIN SHOULD BE CAREFULLY CONSIDERED—THE LAW SHOULD PREVENT EXCESSIVE ISSUE.

It is very desirable that a coinage of silver should be commenced at an early day, and the weight of such coin should be so adjusted by law as to secure them from transportation as bullion, (*the quality of nine hundred-thousandths sacredly preserved;*) at the same time the royalty or difference between the intrinsic and legal value should be not so great as to offer too strong a temptation to counterfeiting.

The actual value given to this portion of the minor currency by the law of the United States, is a sufficient equivalent for the less value as mere bullion; and the restriction to their legal tender for more than five dollars or less, as well as a restriction by law to excessive issues or emissions, would remove all objections, public convenience being the object of the coinage. [See sections 27, 28, and 29 of revised bill hereto appended.]

To designate what the weight of silver coinage should be at this time is a difficult problem, and should be carefully considered by competent financiers, bullionists, and mint officers, before any law is enacted. [See page 11, Senate Mis. Doc. No. 132, 41st Congress, 2d session.]

Sections 10 and 12:

THE THREE-DOLLAR AND ONE-DOLLAR GOLD PIECES SHOULD BE DISCONTINUED.

The three-dollar gold coin is mentioned in these sections; it should be struck out and abolished for the following reasons: It is a departure from the binary divisions and multiple, so natural and convenient in all human transactions; it is too near in value

to the quarter-eagle to be readily distinguished, unless it is made thinner, or by some other form distinguishable from that coin; and finally, it is of no use, but rather an inconvenience in monetary transactions.

Neither is the gold dollar desirable; its coinage should be discontinued. It is not wanted for change, which a proper silver coinage would supply. The objections are, it is too small to be distinguished by the *sensible tests*, and therefore offers unusual temptations to counterfeits, made of silver or copper electrotyped, and being of small value is not usually carefully inspected in current use.

THE WORD PENNYWEIGHT SHOULD NOT BE USED—VERY LITTLE TOLERANCE IN WEIGHT NECESSARY.

The word pennyweight should be struck out, and equivalent decimals of an ounce inserted, according to the present usage of the mint, in this and all other sections of the bill. It would be much better (see fifth line of section 12) to conform to the actual usage of the Mint in making deliveries of coin, from the coiner to the Treasurer, in drafts of five thousand dollars, except the gold dollar, (if retained,) which are usually in drafts of one thousand. The allowances are sufficient, but should be, as before stated, converted into decimals of an ounce. I must add, however, that in the operations of a well conducted mint, with properly constructed balances, there is no need of allowances in the weighings of new gold coins; each draft can, and should be, of the exact legal weight when delivered to the Treasurer.

Section 13. The adjustment of weights in the delivery of silver coins to the Treasurer, &c., should conform in like manner to the usage of the Mint, which is drafts of one thousand dollars. The allowances are sufficient, but should be stated in decimals. [See sections 38, 39, and 40 of revised bill.]

Section 16 provides for the return of clippings, &c., by the coiner to the Treasurer, but there is no provision in this section, or the fifth, for their transfer to the melter and refiner; it is usually, for convenience, a simultaneous operation. [See sections 41 and 43 of revised bill.]

Section 17:

THE ALLOWANCES FOR WASTAGE SHOULD BE REDUCED.

The allowances for wastage are larger than actually necessary; but both sections 17 and 18 require a readjustment carefully made. The word *all* in the tenth line of 17 expresses the meaning of the section, but it is a short word, and may not be always understood in the exact sense intended by the law. [See section 44 of revised bill hereto appended.]

Section 33:

THE DIE-SINKER OR ENGRAVER.

In the seventh article of section 3, the word "engrave" is used; it is not correct, and not applicable, because the dies for coinage are struck from a punch in relief, technically called a "hub." There is nothing for the die-sinker to do, further than to strike in the figures designating the year of coinage, all the processes being mechanical from the forging of the steel to the polishing of the tables of the die for use.[1]

As there is so little said of the duties of the so-called engraver of the Mint, a fuller description of the processes, with remarks, may be appropriate, particularly with regard to devices, &c. It is one of the important departments of the Mint organization, and should be well considered, in relation to the improved condition of mechanical science in this day. The highest grade of artistic ability should be made subservient to the production and issue of the coins of this republic, in which respect it has hitherto been lamentably, if not disgracefully, deficient. [See section 8 of revised bill.]

DEVICES FOR COINAGE OF THE UNITED STATES.

The representation of an eagle should be omitted on the reverse of all the coins, for reasons that will be stated in subsequent remarks.

"A device emblematic of Liberty" is appropriate, and consecrated by our history, and by usage.

A head in profile is the most appropriate, because it gives opportunity for the highest grade of artistic and classical ability to be employed for the composition of the device, and its execution.

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[1] I may be permitted to observe that a perfect knowledge of this process was acquired in the mint of Paris by myself, and introduced into the United States Mint, in place of the rude and laborious processes previously practiced.

Full-length figures are inappropriate. The parts are too small to permit of expression in the design, and do not permit of sufficient depth to "come up," as it is technically expressed, in striking the coin; and they are easier for counterfeit imitations, and more difficult to detect when counterfeited.

Armorial bearings or devices are to be deprecated, they have all the disadvantages of the last paragraph, and are the relics of feudal, and effete monarchical, and semi-barbarous times, inappropriate to free and enlightened republican government.

Besides the above objections to the conventional eagle (it has no prototype in nature) on the reverse of several coins of gold and silver, required by law, there are others of grave importance; a device on both sides, obverse and reverse, of a coin compels a sacrifice of relief or strength on the obverse or principal side, the metal of the blank or planchet being absorbed between them; whereas, a simple reverse, consisting of the legend "United States of America, E Pluribus Unum," &c., around a wreath in low relief, with the denomination of the coin in plain, distinct letters is more expressive, in better taste, and accords with the usage of the most enlightened nations. You are respectfully referred, for a full description of the mode and processes of procuring original dies, published in the Proceedings of American Philosophical Society, February and March 16, 1855 (probably in the library of the Smithsonian Institution).

The Mint of the United States in Philadelphia is now in possession of improved apparatus for procuring from models, and reducing to all sizes and denominations, fac-similes for original dies, and there are artists quite capable, under instructions in regard to exigencies which control the operation of striking coins, to place the United States in the front rank of all nations in the artistic, classical, and mechanical execution of its coinage. [See section 19 of revised bill hereto appended.]

Section 35:

BASE METAL COINAGE—A ONE-CENT PIECE OF BRONZE ONLY SHOULD BE AUTHORIZED.

I am clearly and decidedly of opinion that all the heterogeneous coinage of cents and their multiples, made of silver, alloys of silver, copper, and nickel, should cease, and nothing but cents should be made of bronze of the usual proportions of copper and tin as the best in all respects of the known alloys; it is, however, probable that the time will come—it may not be far distant—when the progress of metalurgical skill will authorize the use of aluminum alloyed with copper for the purpose of minor coinage.

The subsequent sections to the thirty-ninth, inclusive, would require modification or fall with the preceding. [See sections 16 and 17 of revised bill.]

Section 44:

ASSAY OFFICES.

The abolition of all mints, except that of Philadelphia and possibly that of San Francisco (one for the Atlantic and the other, if maintained, for the Pacific portions of the republic) will necessarily require the establishment of assay offices in various bullion producing or dealing localities—New York, and the principal mining districts of the western country. The laws for their government appear to be sufficient, but there are gentlemen, whom you know, whose legal acquirements are superior to mine, and to whose opinions I would respectfully defer. There is, however, one view which I beg leave respectfully to submit, for which we have the authoritative precedent of the mint of France in Paris.

Assayers should be obliged to go through a course of instruction in the United States Mint, be examined, and receive a diploma, with an assay mark, before they are permitted to practice professionally, and that those only, who have been thus prepared, and are of unblemished moral character, should be legally competent to receive commissions as assayers of any of the assay offices of the United States.

F. P.

FEBRUARY 1, 1870.

NOTE.—The clause in brackets in the third article of section 1 is eminently proper; there is no connection whatever between the duties of the treasurer of the Mint and the assistant treasurer of the United States. Their places of business or offices in this city should never have been the same, and were ultimately separated by necessity. [Office of treasurer of the Mint abolished; see sections 3 and 26 of revised bill hereto appended.]

Mr. Peale to Mr. Knox.

1131 GIRARD STREET, PHILADELPHIA,
February 16, 1870.

DEAR SIR: The brevity of the time, within which it seemed desirable that my remarks on the bill revising the mint laws should be transmitted to you, was such, that a longer one for reflection and examination would not have been followed by after-thoughts, such as those which accompany this note.

I pray you to receive them with all due allowance, and to believe me, with sentiments of highest esteem,

Your obedient servant,

FRANKLIN PEALE.

JOHN JAY KNOX, Esq.,
Deputy Comptroller, &c.

P. S.—The highly complimentary and acceptable letter of the honorable Secretary of the Treasury has been received.

Additional Remarks on Mint Laws.

PHILADELPHIA, *February, 1870.*

It would seem proper that some legal provision for the melting of deposits, or those crude quantities of gold dust, or other forms of the precious metals, whose weights or qualities cannot be ascertained without this preparation, should be enacted. It is true that there is a law which provides that bullion brought to the Mint should be in a condition fit for coinage. This is theoretically just and proper; nevertheless, there is propriety in affording facility for the accommodation of the public, by authentic and reliable authorities, for melting and assay of the crude results of mining operations, hitherto absent in this country.

The melting of deposits has of necessity been always practiced in the Mint of the United States by workmen nominally in the melter and refiner's department, but it is no part of his duty as defined by law, neither can it be said that it should be, for reasons which will be obvious hereafter.

The treasurer has no workmen under his control by the present laws, and the deposit melting-room and fixtures are nominally without competent head or direction.

In the operations of this department there is a wide latitude for waste, to which must be added considerable difficulty from the presence of the semi-metals, arsenic, antimony, &c., in the crude metals from the new bullion-producing districts, Montana, Nevada, &c., causing loss and embarrassment, which losses cannot be defined within limits; averages on the large transactions of the Mint have been established, and are no doubt necessary and correct; and it is also true that in all manipulations of gold and silver, either chemical or mechanical, there are inevitable wastages, and after the "closest getting up" of grains there remains the "sweep," &c., which, in present usages, goes to the reduction of wastage in the melter and refiner's department.

Finally, as there is no responsibility attached to this department, though doubtless performed in good faith, it is not likely that the degree of care will be exercised which might be under other circumstances. It may be that the best means of recovering the last particles of precious metals are not known or practiced, or, in other words, there is room for improvement in the economical processes, with a view of reducing the wastage or loss to a minimum.

F. P.

Hon. H. R. Linderman, late Director of the Mint, to Mr. Knox.

PHILADELPHIA, *January 25, 1870.*

DEAR SIR: I duly received your letter of the 18th instant, inclosing copy of a bill revising the laws relating to the mints, &c., with request to examine the bill and return the same with such suggestions and amendments as I may deem desirable.

Having examined the bill, I now return it with the following remarks:

GENERAL PROVISIONS OF THE BILL.

As far as existing laws in relation to the Mint and coinage of the United States are embraced in the bill, they fully meet my approval, nor do I notice any omissions of importance, except that you have not included the provisions allowing the necessary deviations from the legal standard of fineness in the gold and silver ingots, and in the standard weight of the silver coins. The omission of the provisions referred to was no doubt accidental. Having called your attention to the same, I proceed to note the alterations of, and amendments to, existing laws.

DIRECTOR OF THE MINT.

The first section establishes the directorship of the Mint in the Treasury Department at Washington. This measure was recommended by the present able Secretary of the Treasury, in his recent report on the finances, and the subject was no doubt fully considered by him before recommending so important a change. The principal objection to the proposition is, that the chief executive officer should be located at an institution where the various processes and manipulations pertaining to the coinage of the precious metals are carried on. If the uniform practice of the government from the organization of the Mint in 1792 to 1860, which was to continue the Director in office during good behavior, still existed, there would be great weight in the objection referred to, but with new and inexperienced men assuming the duties of the office at every change of administration, the objection is of not much importance. Another objection is that the chief officer, if located at Washington, would not have the advantage of frequent consultations and comparison of views with the operative or manipulatory officers of the Mint on the various subjects of interest arising from time to time in reference to the improvements in science and mechanism in this and other countries. To some extent this objection would be removed by frequent visits of the Director to the Mint at Philadelphia, and his presence there from time to time when important experiments were being conducted. While referring to this subject, I may remark that if the practice of removals had been carried into effect with respect to the assayer and melter and refiner of the Mint at Philadelphia, and assay office at New York, there is no estimating the evils that would probably have resulted to the public service.

If the Director was located at Washington he would be in a position to consult orally or otherwise at all times with his official superior, the Secretary of the Treasury, and receive his advice and instructions on important matters relating to the officers and business of the different mints and assay offices, and be enabled to act promptly on such business as might come before him, which would be of great advantage. The weak point in our present mint system is, that under existing laws the Director of the Mint prescribes in detail, with the approval of the Secretary of the Treasury, (which is generally a mere matter of form,) all the regulations and instructions for the transaction of business at the branch mints and assay offices. Under these regulations and instructions the business is conducted, but all the accounts and vouchers pass direct to the First Auditor of the Treasury, and neither the Director of the Mint nor Secretary of the Treasury have any means of knowing whether the same corresponds with such instructions and regulations or not. Of course, this defect would be obviated if the Director were located at the Treasury Department, as he would then be able to examine all the accounts before their adjustment by the accounting officers. [See sections 1 and 2 of revised bill hereto appended.]

OFFICES OF THE TREASURER OF THE MINT AND ASSISTANT TREASURER OF THE UNITED STATES SHOULD BE SEPARATED.

The third section separates the offices of treasurer of the mint and assistant treasurer of the United States. This is an excellent provision. As long as both offices are filled by the same person no satisfactory examination of funds at either office can be made without first suspending the operations of the Mint, for the reason that the funds of the two offices respectively can be commingled in such manner that a count at either office affords no reliable information as to whether the amount on hand is correct or otherwise; any deficit could probably be made up temporarily by transfers from the one office to the other, and thus go undiscovered. [See sections 3 and 26 of revised bill.]

OPERATIVE OFFICERS SHOULD APPOINT SUBORDINATES.

Section 7 increases the amount of surety to be given by the operative officers. Under existing laws these officers have no legal control of the appointment or removal of their subordinates, to whom they must look for the care and safety of the bullion placed in their custody. If the law in respect to the mode of appointing the workmen in the different departments is not changed, I do not think it would be just to compel the officers to increase their bonds. [See section 4 of revised bill.]

DISCONTINUANCE OF SILVER DOLLAR.

Section 11 reduces the weight of the silver dollar from 412½ to 384 grains. I can see no good reason for the proposed reduction in the weight of this coin. It would be better, in my opinion, to discontinue its issue altogether. The gold dollar is really the legal unit and measure of value. Having a higher value as bullion than its nominal value, the silver dollar long ago ceased to be a coin of circulation; and,

being of no practical use whatever, its issue should be discontinued. [See section 15 of revised bill hereto appended.]

SETTLEMENT OF ACCOUNTS—WASTAGE.

Sections 17, 18, and 19 prescribe more stringent details in relation to the periodical settlement of the accounts of the operative officers. I regard them as necessary and proper. The reduction in the allowance for wastage I also approve, except as to the melter and refiner's silver. The present allowance of silver is three-thousandths. It should not be reduced below two-thousandths. Being a less valuable metal than gold, and frequently containing a small percentage of base metals, which increases the liability to loss in the refining and parting operations, a larger percentage for wastage should be allowed than on gold. While referring to the subject of wastage it should be stated that the allowance therefor is on all the bullion charged to the melter and refiner, which includes the standard bullion in the form of clippings returned from time to time by the coiner and delivered to the former. The result is that the amount of bullion operated on, and on which wastage is allowed, exceeds considerably the actual amount of deposits. There is, of course, much less chance for wastage in simply remelting standard bullion than on bullion requiring refining. I notice this fact in order to show that the allowance for wastage is quite liberal. [See sections 43 and 44 of revised bill.]

ASSAY COMMISSIONERS.

Section 22 discontinues the United States district attorney for the eastern district of Pennsylvania and the collector of the port of Philadelphia as *ex officio* members of the annual assay commission, but continues the United States judge for the district above named as an *ex officio* commissioner. This is a proper alteration. I respectfully recommend that the assayer of the United States assay office at New York be made an *ex officio* member of the assay commission. It is important that there should always be at least one disinterested practical assayer on the commission, to guard against the possibility of its being so constituted as practically to devolve the determining of the fineness of the coins on the assayer of the Philadelphia Mint, who would, in that case, be testing his own work. [See section 49 of revised bill.]

MEDALS—ALL RECEIPTS OF THE MINT SHOULD BE PAID INTO THE TREASURY.

The provision for striking national and other medals at the Mint, under proper restrictions, is proper, and should be retained.

The provision contained in section 24, requiring all moneys arising from charges, deductions, &c., to be paid into the treasury of the United States, is to be commended, as being more clear and explicit than the recent act of Congress on that subject. [See sections 53 and 54 of revised bill.]

ABRASION OF COIN.

Section 25 has evidently been inserted for the purpose of calling forth an expression of opinion on a subject which has not hitherto received much attention in this country, viz, the protection of the public against the circulation of gold coin worn by natural abrasion to such an extent as to no longer be, in fact, a legal tender for their nominal value. In the place of the section referred to, it would be better to insert one providing that all gold coins reduced below a certain weight shall no longer be a legal tender, except at their actual weight. The effect of such a provision would be to drive all light and defaced coins to the melting-pot, and keep in circulation coins corresponding closely to their legal weight. [See correspondence on pp. 81, 82; also English coinage act, section 4, page 34, Senate Miss. Doc. 132, 41st Congress, 2d session.]

MINOR COINAGE—NICKEL-COPPER PREFERRED.

Section 35 provides for the coinage of a one-cent piece of the same alloy as the present three and five-cent copper-nickel coin, and discontinues the issue of the present one and two-cent bronze coins. A bill containing similar provisions was reported by the Committee on Coinage, Weights, and Measures, and passed the House of Representatives toward the close of the last session of Congress, but was not acted on by the Senate. As to the propriety of discontinuing the issue of the two-cent bronze pieces, I suppose there will be but little difference of opinion. The substitution of a copper-nickel one-cent piece for the bronze coin of the same denomination will be objected to on the ground that the latter is more easily manufactured than the former; while admtiting the fact that the alloy composed of copper, tin, and zinc, usually termed "bronze," is more malleable than the copper-nickel alloy,

experiments made at the Mint prove that the manufacture of a copper-nickel cent, such as you propose, is entirely practicable; moreover, it may be stated that the more difficult the alloy is to manipulate, the less liability there is to have counterfeiting of the coins made therefrom successfully carried on. In this respect the argument is decidedly in favor of the copper-nickel piece. It is proper to add that experience shows copper-nickel coins to be no more liable to counterfeiting than the existing silver coins.

There are objections to manipulating in the Mint, at the same time, the two different alloys now used for the minor or base coinage, and one or the other should be discontinued, and the issue hereafter be of one alloy only. Under all the circumstances, in relation to the various issues, and the amount of the different denominations in circulation, with which you are familiar, I think that the coinage of the bronze pieces had better be discontinued and the issue of a copper-nickel cent authorized. [See sections 16 and 17 of revised bill.]

REDEMPTION OF MINOR COINAGE NECESSARY.

The system of exchange and redemption prescribed in section 39 is clearly proper, and required to protect the public against the evils of a redundant issue. The amount of base coins issued since the suspension of specie payments is without a precedent, and in some parts of the country these coins have necessarily become redundant.

Surely a just public policy will dictate some measure of relief for the people in this respect. The amount that will be presented for redemption will be small in comparison with the large gains paid into the treasury from their issue. [See section 33 of revised bill; also, correspondence on necessity of redemption of minor coinage, page 84.]

ASSAY OFFICES.

The section (50) in which you have clearly defined the legitimate functions of assay offices (other than that at New York, where refining and parting are carried on) is a valuable one, and should be retained. [See section 59 of revised bill hereto appended.]

THE COINAGE CHARGE AND THE EXPENSE OF REFINING SHOULD BE REDUCED.

My views in relation to the necessity of reducing the cost of the refining and coinage of the precious metals in this country will be found in my San Francisco report, to which I invite your attention, in the hope that a section containing the necessary provisions on the subject will be incorporated in the bill before it is sent to Congress. I will only add that, disguise it as you may, the coinage charge is, in effect, a direct tax to that amount on the actual producers of the bullion, whereas it should be borne by the people at large, for whose benefit it is converted into coins for a circulating medium. [See sections 25 and 47 of revised bill.]

VOUCHERS SHOULD PASS IN ALL TRANSFERS OF COIN AND BULLION.

In several sections of the bill I notice that you have made amendments to existing laws so as to require vouchers to pass in all the transactions of the Mint.

In section 20 you have also proposed a change in order to prevent delay in the payment of depositors in cases where the bullion previously deposited is refractory. These amendments were proposed by you after your examination of the branch mint in San Francisco in 1866, and were subsequently made a matter of regulation by the department, (see pages 259-'61, Finance Report, 1866.) I regard these amendments, especially the one in reference to vouchers, as very important, and recommend their adoption. [See sections 4, 6, 7, and 47 of revised bill.]

ADDITIONAL LEGISLATION—LAW BETTER THAN REGULATION IN AFFAIRS OF THE MINT.

I notice, also, that you propose to provide by positive enactment of law for several minor points that are now a matter of regulation only. I think this is well, because as little should be left to regulation as possible. Frequent changes in the mode of conducting business at the mints are not desirable. In this connection I will note the fact that, prior to 1867, the *actual* weight of coins delivered to the treasurer was not recorded; if within the limits of tolerance or deviation allowed by law, the legal weight only was recorded. As this weighing prior to delivery to the treasurer is the only check to provide against the uniform issue of what are termed "lights," that is to say, coins below the legal standard, but within the limits of deviation, it should always be recorded. Being at that time Director, I issued instructions to that effect, but, under existing laws, the instructions on this point may at any time be

legally altered or amended by the same authority that prescribed them. The fact may also be mentioned that it was the practice for several years prior to 1867 to carefully weigh the pieces reserved from every delivery of coins to the treasurer for the annual trial of the coinage by the assay commission, to ascertain if the weight of the same were within the legal limits of deviation. The law said these coins should be "taken indiscriminately." Regarding the practice as being *a selection*, instead of an indiscriminate taking of pieces for subsequent trial, I issued instructions for the discontinuance of the practice above referred to. I recommend that the law be made clear and distinct on these and kindred points.

CONCLUSION.

In concluding a somewhat hasty revision of the bill, I beg to remark that the codification and revision of the mint laws is a matter involving careful study and reflection, as well as much labor, but I have no doubt that after having received suggestions from the different experts whom you have addressed, the revision will be brought to a successful completion.

The subsequent enactment of one concise and comprehensive law, in place of the many different and conflicting statutes now existing, will be a convenience to every one who has occasion to refer to these subjects, and also a work of great interest and benefit to the public generally.

Very respectfully,

H. R. LINDERMAN.

JOHN JAY KNOX, Esq.,
Deputy Comptroller of the Currency.

Hon. J. Ross Snowden, formerly Director of the Mint, to Mr. Knox.

PHILADELPHIA, *March 11, 1870.*

MY DEAR SIR: I have written out my views on the bill which you sent me, and have this day mailed the package, (for it is somewhat larger than a letter,) addressed to the Secretary of the Treasury, to your care.

JAMES ROSS SNOWDEN.

JOHN JAY KNOX, Esq.,
Deputy Comptroller of the Currency.

PHILADELPHIA, *March 10, 1870.*

DEAR SIR: I have received your communication inclosing "A bill revising the laws relating to the mints, assay offices, and coinage of the United States," and requesting me to examine it and make such suggestions and amendments as may occur to me. In response to this request I will notice some of its prominent features, and present some suggestions for your consideration.

THE DIRECTOR OF THE MINT.

1. The bill proposes that the Director of the Mint shall have his office in the Treasury Department at Washington.

When the Mint of the United States was established in 1792, and for a few years afterward, the seat of government was at Philadelphia. As a general rule in all the governments of Europe at that time, (and continued to the present,) the principal mint of the country was located at the seat of government. When the general government was removed to the city of Washington, no change was made in the location of the Mint, for obvious reasons connected with the economics of coinage and the supply of bullion, which I need not in this paper discuss. It has from its organization to the present time continued to be The Mint, and when branch mints and assay offices have been from time to time established, the general regulation and supervision of those branches were placed under the Director. President Washington was fortunate in the selection of the first Director, David Rittenhouse, who was not only a man of great scientific acquirements and general knowledge, but was an accomplished and able mechanic. He was the maker of watches, of orreries, and of his own mathematical instruments. His genius found an appropriate employment in providing and arranging the various implements, apparatus, and machinery required for an institution whose function is the coinage of money. Under such a direction the Mint commenced its work; and a line of successors such as Chancellor De Saussure, Dr, Boudinot, Drs. Robert Patterson, father and son, Dr. Moore, and others,

maintained its excellence and efficiency. From 1792 to 1861 no changes were made in the official tenure of the Director, except by voluntary resignation or by the death of the incumbent. It is to be regretted that in recent years a different policy has been introduced, and changes have been made from other causes. This recent practice has to some extent diminished the controlling influence, prominence, and authority which officially belong to the Director of the Mint. But I submit that this is not a legitimate result of the law, but of its administration and enforcement, and is not a valid reason for making the great change in the system which this bill proposes. There are many reasons, which I think are obvious, and will readily occur to any one acquainted with the operations of coinage, why the Director of the Mint should have his official place at the principal Mint. It may well be asked, can an officer at Washington direct, superintend, control, and manage the operations of the Mint in a distant city? Under the familiar legal principle that what a man does by another he does by himself—that is to say, through agents—he may, in one sense, be able to control its operations, but not to superintend and direct them. He could not in any just sense be said to manage the Mint, much less have "the superintendence of the officers and persons employed there." Under the present system all this is accomplished, and more too, by the personal supervision which it is the duty of the Director to give to the institution under his direction and control. He is at hand, also, to make provision for emergencies which frequently arise in the operation of coinage, and which require immediate action.

As to the branch minting establishments, the Director can exercise a controlling influence, not only by instructions and reports, but by the more efficient means which is afforded by the re-deposits of the precious metal received at the principal Mint, and by the assays of bullion and coin made and struck at these branches. These and other means and appliances can give him exact information as to the manner in which distant branches perform their work and duty, and afford him efficient aid to secure uniformity and accuracy in the coinage operations of the several minting establishments of the United States. I hold, therefore, that the Director of the Mint, whose office is held at the principal Mint, can better perform the duties of his office than could such officer located at Washington, where there is no mint.

2. While I present these views, I am of opinion that it would be advantageous to the public service to establish, at the seat of government, a bureau for the transaction of business relating to the minting establishments of the United States, and for the settlement and adjustment of the accounts of these institutions. And here I may state that the bill under consideration contains no provision for the settlement of these accounts. The law, as it now stands, requires the treasurer of the Mint and the treasurers of the branches to present quarter-yearly to the Treasury Department an account of the receipts and disbursements, and of the transactions in bullion and coins, both with the accounting officers and the depositors. It is well known that these accounts have not annually received an intelligent examination at Washington. They have been examined by clerks who have little knowledge of the accounts peculiar to these institutions. I may here state that although the profits on the coinage of the Mint were regularly reported every year, yet for several years the fact was not noticed at the department that large sums of money were reported which were subject to its draft in like manner as other sums of money placed to the credit of the government.

APPOINTMENT OF COMMISSIONER OF MINT AFFAIRS AT WASHINGTON.

I think it would be advisable to authorize the appointment of a Commissioner of Mint Affairs, with such clerical force as the Secretary of the Treasury should approve, and to whom all communications on the subject in question should be made and accounts transmitted. This would provide a convenient office for the transaction of mint business, and relieve the Secretary of the Treasury from details of business which, in the present great extent and diversity of his duties, would be advantageous to that officer, and be beneficial to the public service.

In connection with these duties it would be well also to include that which is proposed in this bill, namely, that such officer should "have charge of all matters statistical and otherwise tending to the development of mining industry and of the precious metals."

It would also be desirable that the annual report of the Director of the Mint should be transmitted to the Secretary of the Treasury through the Commissioner of Mint Affairs, herein suggested, with direction to that officer to examine the same and add to the report such remarks and statements as he should deem expedient. He might also, with great propriety, be requested or authorized to make an annual report on the development of the mining operations of the United States, so far as it relates to the precious metals.

3. As the views herein presented are not in accord with what appears to be the main object of the bill, namely, separating the Director from the Mint and fixing his

office at Washington, it may perhaps be unnecessary to notice the other provisions and details contained therein. But as they may not receive the sanction of the department nor of the committee of Congress to whom the papers may be referred, I will briefly notice some of the other provisions in the bill and some omissions which occur to me.

Moreover, this course seems proper, because if the suggestion which I make in reference to the appointment of a Commissioner of Mint Affairs should be favorably received, the bill in question can readily be so amended as to make the other sections harmonize with it.

THE MINT AND ITS BRANCHES.

4. It is proper that one mint, as is now prescribed by law, should be designated as "The Mint," and the others as branches of it. For the sake of unity and proper organization this, it seems to me, is necessary. Many reasons could be given for this opinion. I will content myself with presenting but one, which I think sufficient. The coinage of the Mint and its branches should be designated and known. "For the purpose of discriminating the coins stamped at each branch and at the Mint itself," as is now required by law, a letter is placed on the reverse of the coins struck at each branch; the absence of any letter (as a mark) on the coins shows that such coins were struck at the mint. There are many advantages for the continuance of this practice; prominent among which is that, in case of defective coinage, either in fineness, weight, or otherwise, the *place* where the coins were struck may be known. If a branch mint which has an inconsiderable coinage should, by accident or design, issue pieces outside of the limits prescribed by law, if there was no mode of ascertaining where the coins were issued, the coinage of all the minting establishments might be required to be withdrawn from circulation. A case in point did happen about twenty years ago in the coinage of one denomination of coin struck at the branch mint at New Orleans. I may add that it is due, as a matter of justice to the officers of each mint, that the coins should thus be designated.

5. There is an omission to require assay pieces to be transmitted from different mints for the annual assay or trial of the fineness and weight of the coins. These assay pieces are taken indiscriminately, at each delivery of coins, from the chief coiner to the treasurer, the number being prescribed by the Director. [See section 42 of revised bill hereto appended.]

6. The transmission to the Treasury Department of quarter-yearly accounts from the Mint and its branches, and the assay offices, as is now prescribed by law, is omitted. [See section 4 of revised bill.]

AMOUNT OF SILVER USED IN ALLOY SHOULD BE DIMINISHED.

7. The alloy of the gold coins, in this bill, is the same as is now prescribed by law. But the quantity of silver may, with great propriety, be reduced from fifty-thousandths, as is now *permitted*, to say ten-thousandths. I, as Director of the Mint, made this matter a subject of *instructions* in September, 1853, which I reproduce here.

"It is highly important to secure uniformity in our gold coinage; and to accomplish this all deposits of native gold, or gold not previously refined, should be assayed for silver without exception, and refined to from .990 to .993. The gold coins of the Mint and its branches will then be nearly thus: Gold, .900; silver, .008; copper, .092."

The object of this regulation was to attain a greater uniformity in the *color* of the coins than had theretofore been obtained, and also to save the loss of silver unnecessarily used in the alloy. Under these instructions the coinage has since that time been executed. But the passage of a new law would seem a fit occasion to make this the subject of legislation by making the limit not to exceed ten-thousandths in every one thousand parts. At present it is *permissible* to use fifty-thousandths of silver, which would make the coin of a lighter color than is desirable, and has no effect whatever upon their value, the excess of silver being uselessly employed. [See section 13 of revised bill.]

COINAGE CHARGE SHOULD BE ABOLISHED.

8. Gold coins being the only metallic money of the United States, and a standard of value, it is, in my judgment, inexpedient to authorize a charge upon such coinage. It reduces *pro tanto* the mint price of bullion below its market value. Where there is no charge for coinage the mint price is the same as the value of the metal when coined. It is to be noted that, under our present laws, there is a coinage charge, and it will be observed, by reference to the tables of the value of foreign coins annexed to the annual reports of the Director of the Mint, that there are two values stated: 1. The value of the coins as compared with the legal content or amount of

fine gold in the coins of the United States. 2. The mint value of such foreign coins after the deduction of the coinage charge, namely, the one-half of one per cent. There is a similar double valuation of all bullion brought to the Mint for coinage. The abrogation of a coinage charge would rid us from the incongruity of giving two different values to foreign coins and uncoined bullion; and under some circumstances, connected with our commerce and exchange with foreign nations, it would have a tendency to increase our gold coinage. On the other hand, if the market value is greater than the mint price, our coinage receipts must be diminished. And just here I make the general remark, applicable to all coinage, that it is a weak invention to attempt to make money with a less quantity of metal than that metal is worth in the markets of the civilized world. [See section 25 of revised bill hereto appended.]

CHARGES OF THE MINT—EUROPEAN CUSTOM—PRIVATE REFINERIES SHOULD BE ENCOURAGED.

9. The provisions of the bill under consideration for charging the depositor with the expenses incurred in refining, separating, toughening, &c., are proper, and are such as are authorized by law.

In the European mints all metals deposited for coinage are required to be fit for coinage, and of standard fineness, or above the standard; the refining being done in private establishments.

While it is inexpedient, until private refineries are in operation in this country, to refuse the reception of unprepared and unrefined bullion, yet, to encourage such work, and looking forward to the time when they will be in operation, I think it would be proper to give a preference in the order of payment of deposits to bullion of that character. This is somewhat provided for in one section of the bill, but not to the extent above suggested. [See sections 46 and 47 of revised bill.]

THE PRESENT SILVER DOLLAR SHOULD NOT BE DISCONTINUED.

10. I see that it is proposed to demonetize the silver dollar. This I think unadvisable. Silver coins *below* the dollar are now not money in a proper sense, but only *tokens*. I do not like the idea of reducing the silver dollar to that level. It is quite true that the silver dollar, being more valuable than two half-dollars or four quarter-dollars, will not be used as a circulating medium, but only for cabinets, and perhaps to supply some occasional or local demand; yet I think there is no necessity for so considerable a piece as the dollar to be struck from metal which is only worth ninety-four cents. When we speak of dollars let it be known that we speak of dollars not demonetized and reduced below their intrinsic value, and thus avoid the introduction of contradictory and loose ideas of the standards of value.

REDUNDANCY OF SILVER COINS SHOULD BE PREVENTED.

When specie payments are resumed with us, or when the paper currency and gold are rated at the same, or even nearly the same, value, unless some stringent restrictions are made upon the issues of reduced silver coins, as now authorized, there will be a plethora of them on the market, and their circulation will be not only an inconvenience but a loss. [See sections 27, 28, and 29 of revised bill.]

MINOR COINAGE—A 1-CENT PIECE ONLY SHOULD BE ISSUED, COMPOSED OF COPPER AND NICKEL —COPPER EIGHTY-EIGHT PARTS; NICKEL TWELVE PARTS.

And in this connection I beg to say that the base coinage provided for in section 35, of five and three-cent pieces, will soon be found to be a positive nuisance and a subject of great embarrassment and loss, especially to small dealers. Moreover, the intrinsic value of the copper and nickel in these pieces, and in the one-cent pieces also, is so largely below the nominal value of the coins that we will have a flood of counterfeits and imitations of them, and will otherwise experience great inconvenience from their introduction into circulation. These remarks also apply to the pieces of the character lately issued; and this bill, it may be said, only continues their use. But I think it was a great mistake to abandon the cent of 1857, and substitute one of greatly inferior value, and, moreover, extend the issuing of such base coins to five-cent and three-cent pieces. I have not time at present to enlarge upon this subject, but I may state that, in my judgment, the five-cent piece should be composed of silver, and if a three-cent piece is required, let it also be of silver, as heretofore authorized. The cent is the only base coin which should be issued, and this ought to contain the characteristics and composition of the cent adopted in 1857. That cent maintained its color well; it was of convenient size and weight, and a difficult coin to imitate or counterfeit. It was abandoned a few years ago because

it was considered that the material of which it was composed—eighty-eight per cent. copper and twelve per cent. nickel—was *too valuable;* when at that very time it was yielding a profit to the government on its issue of about *fifty-six per cent.* Surely the government can afford to put *one-half cent's* worth of metal into a coin which is issued as *one cent.*

CONSOLIDATION OF OFFICES OF SUPERINTENDENT AND TREASURER.

11. The proposition to unite the offices of superintendent and treasurer appears to me objectionable. The disbursements for labor, materials, and supplies of all kinds used in a minting establishment are paid by the treasurer on the warrants of the superintendent. Depositors of bullion are also paid on similar warrants. It would therefore seem improper to unite these offices in one person. If it is necessary to diminish the number of officers, I suggest that the assayer could with some propriety act as treasurer. But wherever the operations are large enough to justify the organization of a mint, I am of opinion that the several offices required should be held by separate persons; this tends to afford a proper check upon their accuracy and fidelity. At the assay offices, except the assay office at New York, the assayer might very properly perform the duties of treasurer. [See sections 26 and 41 of revised bill hereto appended.]

GOLD CERTIFICATES.

12. I see no reason for requiring the certificates of deposits of *gold bullion* to be presented within any specified number of days, as is provided for in this bill. On the contrary, I would give the depositor such a certificate as could be used for all purposes as money, and at any time or at any place. I would go further. I would permit several certificates to be issued for the same deposit, by dividing the amount into such sums—say, not less than $50 or $100—as the depositor may wish, and make them payable to *bearer.* And, in conjunction with this, I would insert a further provision to allow similar certificates to be issued at the Mint in Philadelphia, the assay office in New York, and the branch mint at San Francisco, and at the treasury and principal assistant treasuries of the United States, on deposits of gold coins of the United States. The advantages of such a measure are manifold. But the subject is too broad to be discussed in this paper. I made a similar suggestion or recommendation in 1857, and wrote out my views upon it at some length. I have a copy at hand, but it is too long to insert here. The present condition of the country, now so near the resumption of specie payments, or, rather, when the values of paper money and gold are approximating each other, renders such a measure, namely, the issuing of coin certificates on the deposit of gold bullion and gold coins, a matter of peculiar interest and importance.

* * * * * * *

I intended to notice some other points, chiefly of detail and phraseology, in the bill, which seem to require revision; but as you will have responses from the present officers of the mints, they will, no doubt, by them be brought to your attention.

I have the honor to be, with the highest respect, your obedient servant,

JAMES ROSS SNOWDEN.

Hon. GEORGE S. BOUTWELL,
Secretary of the Treasury.

Hon. George F. Dunning, late superintendent of the United States assay office in New York, to Mr. Knox.

NOTES ON THE MINT BILL.

Section 1. Would not less opposition be made to the bill, if the Mint at Philadelphia was, as far as possible, left untouched? That mint must necessarily be the parent mint for years to come. The branch mints must be supplied with dies and machinery from Philadelphia, where mechanics have been specially trained for making coining-presses, rolls, furnaces, molds, &c.; and officers and assistants newly appointed to the branch mints must go to Philadelphia for preliminary instruction. The annual assay must be held at Philadelphia, and all national medals must be struck there; and all experiments for new coins or alloys will necessarily be conducted at the Philadelphia Mint. Then why not let the mint establishment consist of—1. The Mint of the United States and branch mints, at which bullion should be refined by parting, and paid for in coins or fine bars. 2. Assay offices simply, where bullion

should be refined by fluxing only, and the same metal returned in unparted bars, stamped with weight, fineness, and value. 3. A Mint Bureau at Washington, attached to the Treasury Department, having general supervision?

BRANCH MINT AT NEW YORK.

This would involve the changing of the New York assay office to the branch mint at New York, which ought to be done. It is a mint in all except actual coining money, and the power to clothe it with this attribute could be left to the discretion of the President.

COMPTROLLER OF THE MINT AT WASHINGTON.

If the Mint at Philadelphia is left as it is, the chief officer at Washington would have to be called "Director General of the Mint," or "Comptroller of the Mint." Why not combine this office with that of Comptroller of the Currency and change the title to "Comptroller of the Mint and Currency?"

HIS DUTIES.

Section 3, clause 1. In order to justify the creation of a Mint Bureau, &c., enlarge the power of the Director (Comptroller) thus: After the words "authorized by law" add: "He shall, with the approval of the Secretary of the Treasury, prescribe all regulations for their government; direct the mode of keeping and rendering their accounts; and shall carefully scrutinize the same before they are rendered to the auditor; and all reports, estimates, and requisitions from the mints or assay offices shall be submitted for his examination and supervision." "He shall make an annual report," &c., as far as "now prescribed by law," then add: "He shall take measures to procure accurate statistical information of the discovery and development of mines of the precious metals, the character of their ores, and the methods of working the same; and shall, as fully as practicable, make his office useful in the development of the mining industry of the country." [See section 2 of revised bill hereto appended.]

Clause 2. After the word "Director," in the fourth line, add: "He shall draw warrants upon the treasurer and other officers for the transfer or delivery of coins or bullion; he shall check the treasurer's calculations of the value of deposits, and shall scrutinize all bills for ordinary expenses; and no payment of money, either for bullion deposits, or for ordinary expenses, shall be made by the treasurer except upon a warrant of the superintendent," &c.

DUTIES OF TREASURER.

Clause 3. After "the treasurer," add "of each mint." The parenthesis prohibiting the treasurer from being also assistant treasurer should be covered by section 54. After the word "mint," in third line, change thus: "He shall receive all bullion brought to the mint by depositors, and shall give receipts for the same; and all coins and bullion in the mint shall be in his custody, except when the same is legally transferred to other officers. He shall calculate, not estimate, the exact value of each deposit of bullion, and the charges to be levied thereon; and shall, upon warrants of the superintendent, make payment for the same in coins or bars of the same species of bullion as that deposited; and shall furnish to the owner thereof a certified memorandum of the weight, fineness, gross value, charges, and net value of his deposit." "He shall keep regular and faithful accounts," &c. [See sections 4 and 26 of revised bill.]

MELTER AND REFINER AND COINER.

Clause 4. After "assayer" add "of each mint."

Clause 5. Alter thus: "The melter and refiner" "of each mint" "shall execute all the operations which are necessary in order to form fine bars or ingots," &c.

Section 14. In line 6, for the phrase "within the legal limits of the standard weight," substitute "within the legal limits of deviation." In the last line of this section, instead of the words "to be again formed into ingots and recoined," say, "who shall cause the same to be immediately remelted." The melter and refiner ought not to have the option of keeping light coin *on hand*. A dishonest officer might use them to buy gold bullion outside and keep his accounts good in that way. [See section 41 of revised bill hereto appended.]

Section 15. In line 6, instead of "deposited in a chest," say, "deposited in the pyx," &c. This section should provide for the transmission to the Philadelphia Mint of *branch mint assay coins*. [See section 42 of revised bill.]

ACCOUNTS OF TREASURER WITH OTHER OFFICERS.

Section 17. Change as follows: "That in the treasurer's account with the operative officers of each mint and assay office, the melter and refiner, or coiner, as the case may be, shall be debited with the standard weight of all bullion delivered to him; and shall be credited with the standard weight of all bullion, coins, clippings, sweeps, &c., returned by him to the treasurer, once at least in every year," &c., as in printed bill.

Section 18. Line 1, on page 8, change "between the amount charged and credited" to "between the amount charged and the amount credited." No other change.

ASSAY COMMISSIONERS.

Section 22, line 2. Change "respective standards and weights" to "respective standards of fineness and weight."

Memorandum.—A *weight* fixed by law is as much a "standard" as a fineness so fixed.

Line 4, instead of "the Mint" say "the several mints."

Line 16, change "standard fineness and weight" to "standards of fineness and weight."

Line 19, change "standard or weight" to "standards" simply.

[See section 49 of revised bill.]

ABRASION OF COINAGE.

Section 25. This section is a temptation to holders of old coin to lighten them, so as to get them coined free of charge. I suggest the omission of the words "at the expense of the United States."

STANDARD WEIGHTS FOR EACH MINT.

Section 27 and section 28. Substitute: "That in the weighing of bullion at the several mints and assay offices, and in the accounts to be kept thereof, the unit of weight shall be the ounce troy; and it shall be the duty of the Director [Comptroller] of the Mint to provide each mint and assay office with a set of carefully-adjusted standard weights, consisting of a one-ounce weight and the necessary multiples and decimal subdivisions thereof, from the thousandth of an ounce to three hundred ounces; and these weights shall be used only for the purpose of adjusting the weights ordinarily employed at the several mints and assay offices, such adjustment to be made at least once in every year, under the inspection of the superintendent and assayer of each institution: *Provided*, That the standard weights of the Mint at Philadelphia shall be adjusted annually in the presence of the assay commissioners on the day of annual assay." [See section 51 of revised bill hereto appended.]

Clause 6. "The coiner" of each mint shall "execute," &c. After the word "purpose," in the fourth line, insert: "He shall keep a careful record of all transactions with the treasurer, noting the weight and character of the bullion received and delivered, and he shall be responsible," &c. [See section 7 of revised bill.]

THE ENGRAVER: THE OFFICE NOT NECESSARY.

Clause 7. Alter thus: "The engraver of the Mint shall prepare and engrave, with the legal devices and inscriptions, all the dies required for coinage in the several mints, and shall perform such other service in the preparation of dies for coins, medals, &c., as shall be required by the Director [Comptroller.]"

I would abolish the *office* of engraver, and empower the Director to employ competent artists to prepare dies, &c. The *office* is useless, and is a hindrance to improvement. [See section 8 of revised bill.]

ASSISTANTS TO OPERATIVE OFFICERS.

Section 4. After the word "superintendent" in the first line, substitute "may" for "shall," and in the third line change "one assistant" to "one assistant officer."

N. B.—The assayer needs several assistants, [not officers], young helpers or assayers. These should be provided for. I would give these the title of "laboratory assistants," and insert after the word "Philadelphia," in the fourth line: "He may also appoint such clerks for the superintendent, and such laboratory assistants for the assayer as shall be approved by the Director [Comptroller.]"

AMOUNT OF BONDS OF OFFICERS.

Section 7. Very few men fit for mint offices can give bonds for $50,000. Then the responsibility of a superintendent or assayer is far less than that of a melter and refiner, or coiner, or treasurer. I would have the amount of bond to be required, *in each case*, to be determined by the Secretary of the Treasury and the President. [See section 11 of revised bill.]

ALLOY SHOULD BE OF COPPER ONLY.

Section 9. After the word "standard," in the first line, add: "of fineness." Then in fixing the alloy of gold coins in the fifth line, say: "And the alloy of the gold coins shall be of copper." Perhaps it is best to require the alloy to be wholly copper, and say nothing about silver, or insert, "with the least practicable intermixture of silver."

Memorandum.—If it were practicable to *part out* all the silver from gold, the alloy of gold coins should be wholly copper. Formerly it was the practice to aim at a "gold color" by adding silver in the alloy of gold; but this is discontinued. [See section 13 of revised bill hereto appended.]

GOLD AND SILVER COINS.

"SECTION 10. *And be it further enacted*, That the gold coins of the United States shall be a dollar, a quarter-eagle or two-and-a-half-dollar piece, a three-dollar piece, a half-eagle or five-dollar piece, an eagle or ten-dollar piece, and a double-eagle or twenty-dollar piece. And the standard weight of the gold dollar shall be twenty-five and eight-tenths grains, and the other gold coins shall be in the proportion of twenty-five and eight-tenths grains to one dollar of value; and these coins shall be a legal tender in all payments."

The law ought first to declare what coins shall be made, and then fix their weights. [See sections 14 and 18 of revised bill.]

"SECTION 11. *And be it further enacted*, That the silver coins of the United States shall be a dollar, a half-dollar, a quarter-dollar, a dime or tenth of a dollar, and a half-dime or twentieth of a dollar. And the standard weight of the silver coins shall be in the proportion of three hundred and eighty-four grains to the dollar; and these coins shall be a legal tender in all payments not exceeding five dollars." [See section 15 of revised bill.]

SILVER COINS SHOULD BE RECEIVED FOR CUSTOMS.

Section 12. Why except "duties on imposts?" The United States can certainly afford to receive its own silver coins to the extent of five dollars.

TOLERANCE.

Section 13. After the word "enacted," in the first line, insert: "That in adjusting the weights of the silver coins, the following deviations shall not be exceeded in any single piece: In the dollar and half-dollar, one grain and a half; in the quarter-dollar, dime, and half-dime, one grain." This seems to have been overlooked in the printed bill. The rest of this section without change, except changing pennyweights to grains. The changes in section 12 would be—

Three pennyweights to 72 grains.
Two pennyweights to 48 grains.
One and one-half pennyweight to 36 grains.
One pennyweight to 24 grains.
One-half pennyweight to 12 grains.
[See section 39 of revised bill.]

CONVERT PENNYWEIGHTS TO GRAINS.

So long as troy weights are in use at the mints, the employment of the term "grains" is unavoidable. The weights of the coins, expressed in *decimal* parts of the ounce, would be as follows:

Gold dollar	25.8	grains equal 0.05375 ounces.
Gold quarter-eagle	64.5	grains equal 0.134375 ounces.
Gold three-dollar	77.4	grains equal 0.16125 ounces.
Gold half-eagle	129.0	grains equal 0.26875 ounces.
Gold eagle	258.0	grains equal 0.5375 ounces.
Gold double-eagle	516	grains equal 1.0750 ounces.
Silver dollar	384	grains equal 0.80 ounces.
Silver half-dollar	192	grains equal 0.40 ounces.
Silver quarter-dollar	96	grains equal 0.20 ounces.
Silver dime	38.4	grains equal 0.08 ounces.
Silver half-dime	19.2	grains equal 0.04 ounces.

Change in section 13:
Four pennyweights to 96 grains.
Three pennyweights to 72 grains.
Two pennyweights to 48 grains.
One pennyweight to 24 grains.

The weights of the silver coins might readily be expressed in decimals of the ounce, but this would be impracticable for the gold coins.

Of course the small allowances in the adjustments of coins cannot be expressed in decimals of the troy ounce without absurd and interminable fractions. For example:
One grain is equal to 0.00208333+ ounce.
One half-grain is equal to 0.00104166+ ounce.
One quarter-grain is equal to 0.00052083+ ounce.
[See sections 14, 15, and 39 of revised bill hereto appended.]

Hon. George Eyster, treasurer of the Mint at Philadelphia, to Mr. Knox.

UNITED STATES TREASURY,
Philadelphia, January 27, 1870.

DEAR SIR: I have yours of the 22d instant in which you invite my views upon the accompanying bill revising the laws relative to the mints, assay offices, and coinage of the United States. My experience at the mint has been so brief as to cause me to feel that I am not the person to express an opinion upon your work, certainly not a reliable opinion upon many parts of it. There are gentlemen in this city, both connected with the Mint and retired from it, whose long experience in that institution and consequent familiarity with its several departments, peculiarly qualify them to give an opinion at once valuable and reliable. Then, too, as you are aware, since the establishment of the assistant treasurer's office at the custom-house, the incumbent has been compelled to spend the larger part of his time at the latter place, so that he is obliged to intrust the duties of his position as treasurer of the Mint almost entirely to subordinates, and rely upon their fidelity and judgment in many important particulars.

A cursory examination of the proposed law has revealed a few defects, as it appears to me, principally unimportant, which it is scarcely necessary to recite here. They relate largely to the phraseology, and the changes suggested may, in some instances, render the meaning clearer. My suggestions may be found marked upon the margin of the bill, which I herewith return. It is but right to say that these, with the omission to provide for the treasurer's bond, would very probably have come to your notice upon further review of your work.

REDEMPTION OF THE MINOR COINAGE.

Referring to the thirty-ninth section, which provides for the redemption of copper-nickel coins, I have to remark that it would be better to make these pieces redeemable only at the Mint, or, at most, only by such assistants treasurers in addition as have offices located at the same points as assay offices. If each assistant treasurer and each designated depositary shall be required to redeem these pieces, the danger of redeeming counterfeits will be increased, and spurious coins will find their way to that office most likely to receive them. It will be impossible for each office to provide itself with such a force of skilled counters as to obviate all danger on this account. The present five-cent piece, though not yet largely counterfeited, has been so well imitated as to require the assistance of the assaying department at the Mint to determine its character. It is suggested, therefore, that the points at which the proposed pieces are to be redeemed in national currency should be as few as possible, and, at most, only those that have been already indicated. It is believed, too, that an opportunity for redemption at only those points will relieve any actual redundancy. [See section 33 of revised bill hereto appended.]

WASTAGE AND TOLERANCE—REDUCTION NECESSARY.

Upon the subject of wastages and tolerances I have little to say. The reduction in both meets with my approbation, as the experience of years demonstrates that the limit of the first can be largely curtailed without danger or inconvenience to the officers interested, while the continued allowance of an unnecessary margin may some day prove the inducement to carelessness or dishonesty. The same remark applies to the tolerances or deviations in pieces and in quantities of coins from the standard weight. The adjustment should be as accurate as skill and industry can make it. To send coins out from the shops of unequal weight would be discreditable to the government, as well as furnish an opportunity for profit to sharp and unscrupulous dealers. It will not do to say that the limits of wastage and tolerance already

fixed by law need not be changed because of the present and past good management of the mints on the part of the operative officers. The proposed legislation is for the future, which must sooner or later witness changes in the personnel of every institution. It is also intended to meet every possible phase of management and mismanagement. So far as regards these reductions the bill as draughted but prescribes that what good men can do and do, bad men ought to do and must do. [See sections 36, 38, 39, and 40 of revised bill.]

BUREAU IN THE TREASURY DEPARTMENT.

The salient feature of your bill seems to be the proposition to establish an office at the Treasury Department at Washington, to take the general supervision of all mints and assay offices belonging to the government. If these places were now for the first time being established, the propriety of managing and directing them from a principal office at Washington would scarcely be questioned, and, indeed, a contrary course would probably not suggest itself. At the establishment of the Mint in Philadelphia, in 1792, that city was the seat of government of the United States as well as the chief commercial city of the country. After the removal of the seat of government the institution was continued at Philadelphia by legal enactment for successive periods of five years, until, in 1828, it was located there indefinitely. Now, if the proposition were to remove the Mint itself, I should very much regret it, as would every Pennsylvanian; and I think very weighty reasons could be adduced to show the impolicy of any such course. But the proposition of your bill, to place the general supervision of the several mints and assay offices at Washington, strikes me more favorably. It seems to be justified by the increase in number of the institutions in contemplation, and their being situated at different and widely remote places; by their immense importance and the vast development in recent years of the mineral and mining resources of the country. The Director of the Mint has the general direction of the branch mints and assay offices, subject to the approbation of the Secretary of the Treasury. Here, then, are two officials, the one subject to the other, having control of at least six important government establishments, neither of whom is on the ground in any case, and who do not even have their offices in the same State, let alone city. It appears to be more important that these officials should be near one another, for the purpose of consultation about the workings and interests of the whole, than that either should reside at any one of the establishments under their supervising care. The present arrangement for managing the mints and assay offices is an exception to the practice of the government. No other interest subject to the national authority of so great importance, and attaching to so many places, is managed through a central office remote from the Capital. The government might with equal propriety require its several assistant treasurers and designated depositaries to be controlled at Washington by way of New York, as continue its present anomalous practice in regard to its mints and other similar institutions. There is another weighty reason for locating the supervising officer of all these institutions at Washington. It has become the practice to charge the representatives of the people in Congress with the duty of attending to the interests of individuals or localities of their constituency, in any way under the care or control of the national government. The presence at Washington of the head of the mints and assay offices would afford the representatives of the people facilities to attend to the requests of their constituents connected with these interests that they have never yet enjoyed. With the opportunity to confer at Washington, a little leisure could be improved. As it now is, resort must be had to correspondence, not always satisfactory, or a journey, taking them away from public duties.

TREASURER SHOULD APPOINT SUBORDINATES.

That feature in your bill authorizing the treasurer to appoint his own employés I especially commend. Personally, it can make no manner of difference to me, for you propose also a severance of the office of assistant treasurer of the United States from that of treasurer of the Mint, leaving me in the former place. I have long felt that injustice has been done to the treasurer. As you know, the Director and I completed some weeks ago a correspondence on the subject, which is now in the department awaiting a decision upon our respective claims. Congress enacted, by a joint resolution, on the third day of March, 1851, "that the several treasurers of the United States mints, be, and they are hereby, authorized to appoint their own clerks, subject, however, to the approval of the Secretary of the Treasury." The preamble to this joint resolution recites that the treasurers are required to give bond in heavy penalties for the faithful performance of their duties, *and of those under them*, and avers that it is but just that the selections of their clerks should be under their control.

Now, keeping out of view the fact that, with the possible exception of the deposit melters, the treasurers could have no employment for any other class of employés than clerks, and that, with the exception before mentioned, at the date of the passage of the joint resolution aforesaid all his employés were denominated clerks, a fair construction of the joint resolution, in view of the preamble and the relief sought to be afforded, requires that the word clerks should be read in the sense of employés.

Since 1851 the treasurer has been accorded six appointments, to wit: a chief clerk, a weigher, a calculator, an accountant, a register, and a cashier. At various times since 1851 there have been persons appointed and assigned to duty by the Director in the bullion and cash departments, until the treasurer's force appointed by the Director almost equals his force appointed by himself. The persons appointed by the Director are termed assistants, superintendents, and aids, and in most instances perform clerical duties, and the identical duties that the treasurer's own appointees perform. They are appointed by the Director under his general authority to appoint servants and workmen. If the Director may appoint servants and workmen, and assign them to clerical duty in the treasurer's department, what becomes of the treasurer's undoubted right to appoint clerks? Has not the Director grasped the substance and left the treasurer but the shadow of his right?

But I will pursue the subject no further here. As has been stated, I have discussed it fully elsewhere. I am glad to discover that your bill will accomplish for some future treasurer what my argument may have failed to obtain for me. This feature, without doubt, ought to become a law. In the discussion with the Director, to which I have alluded, the Director takes the ground that the treasurer ought to entertain no anxiety about the bullion-room, for the reason that he is under nothing but a moral responsibility for the bullion until it is about to be turned over to the melter and refiner. I do not agree with the Director here. If the Director be right, however, there ought to be a section added to your bill to protect the rights of the thousands of depositors who annually intrust their millions to the treasurer. This treasure is always in the treasurer's custody for days, often for a month. The depositors are entitled to have something better for their security than the sense of moral accountability of any man or officer.

Referring to your twenty-fourth section, in which provision is made for paying and covering into the treasury of the United States, on the warrant of the superintendent, funds arising from the manufacture of medals, it may not be amiss to state that this has heretofore been unnecessary, for such moneys never came into the treasury of the Mint, but were received and accounted for directly by the Director. The practice has seemed to me to be without authority of law, and the section is probably explicit enough to correct it. [See sections 4 and 54 of revised bill hereto appended.]

COPPER-NICKEL COINS APPROVED.

I am satisfied of the wisdom of the provision your bill makes for a new set of base coins. As good an argument as any in favor of their issue is the fact that the public want and expect them. There seems to be a tendency all the while, hard to explain perhaps, yet nevertheless true, to tire of our inferior coinage. Those pieces at present in circulation are uniform neither in design nor composition, besides not being especially artistic. The frequent renewal of these pieces and the change in the design both baffles and discourages the counterfeiters, and proves a cheaply purchased benefit to both the people and the government. Then, too, the composition of the metals proposed furnishes an alloy altogether desirable on the score of appearance, wear, cost, and susceptibility to prompt detection when imitated. (See section 17 of revised bill.)

OFFICE OF TREASURER OF THE MINT MAY BE ABOLISHED.

It would seem that the office of treasurer of the Mint might be abolished altogether, and the duties of that position devolved upon the superintendent. This might make necessary the creation of a system of checks to meet the new order of things; but that could be done without difficulty. Each operative officer, for instance, might be required to approve all vouchers for purchases for his own department, or one might be authorized to approve for all. It might be made the duty of the assayer to approve the calculation upon which payment for each deposit of bullion is made. These are probably all the checks that a proper caution would suggest. (See sections 3, 26, of revised bill.)

There might be some change in the arrangement of subjects in your bill, but this I will leave to others to suggest or your own reflections.

NECESSITY OF REVISION OF MINT LAWS.

The mint laws need codification and they need revision. You have made a good beginning, and I hope you may meet with abundant success in your undertaking.

Very respectfully,

GEORGE EYSTER,
Treasurer of the Mint.

Hon. JOHN JAY KNOX,
Deputy Comptroller of the Currency, Washington, D. C.

Dr. M. F. Bonzano, formerly melter and refiner of the Branch Mint at New Orleans, to Mr. Knox.

NEW ORLEANS, *February 21, 1870.*

DEAR SIR: I had the pleasure of examining the "Bill revising the laws relative to the mints, assay offices, and coinage of the United States," and so far as I am able to judge of the provisions therein contained, believe them to be sufficient for the purposes intended. I beg leave, however, to draw your attention to some sections which might be susceptible of amendment.

SILVER USED AS ALLOY SHOULD BE REDUCED.

Section 9. If the proportion of silver in the alloy of gold may vary so largely with respect to the copper, it will be difficult to obtain the uniformity of color which contributes much to the beauty of our coinage. By limiting the silver in the alloy to one-fifth or one-fourth of the copper a greater uniformity of color would be attained without increasing the difficulties of manufacture. (See section 13 revised bill.)

METRIC SYSTEM OF WEIGHTS RECOMMENDED.

Section 10. It seems to me very desirable that the weights and dimensions of coins should be expressed in the metrical system, instead of the troy ounce, pennyweight, grains, &c. An opportunity is here presented, which may not occur often, of making the people familiar with this beautiful system, without requiring too great an effort. (See sections 14, 15, 17 of revised bill, also pages 11 and 26 of Senate Mis. Doc., forty-first Congress, No. 132.)

WASTAGE ON GOLD, AMPLE; ON SILVER, SHOULD BE INCREASED.

Section 18. One-thousandth for wastage on silver, though usually sufficient, may in certain cases fall short of the actual loss. In melting amalgam and very base metal, the toughening with niter is indispensable, and the silver becomes partially oxidized in this operation. On gold, the allowance of one-thousandth for wastage is ample. (See section 44 of revised bill.)

MANUFACTURE OF SMALL BARS.

Section 32. The manufacture of small bars, say of less than ten ounces, may at times interfere with the regular coinage operations. If such bars are authorized, their manufacture should be restricted to the assay offices alone.

Very respectfully and truly, your obedient servant,

M. F. BONZANO.

JOHN JAY KNOX, Esq.,
Deputy Comptroller of the Currency, Washington, D. C.

Assistant treasurer at New York to the Secretary of the Treasury.

UNITED STATES TREASURY,
New York, January 28, 1870.

SIR: I have the honor of handing you herewith the draught of bill relative to the Mint and its branches. Such suggestions as have occurred to the officers of the assay office and to me are noted on the margin, and are respectfully submitted.

I am, with respect, your obedient servant,

CHAS. J. FOLGER,
Assistant Treasurer United States.

Hon. GEORGE S. BOUTWELL,
Secretary of the Treasury, Washington, D. C.

Andrew Mason, melter and refiner, United States assay office, New York, to Mr. Folger.

UNITED STATES ASSAY OFFICE,
New York, January 27, 1870.

DEAR SIR: Having united with my fellow officers in a careful consideration of the details of the bill inclosed in the letter of the Secretary of the Treasury of the 18th instant, to which you have called our attention, I trust it will not be considered improper, under the large latitude given by the instructions, to suggest the advisability of concentrating all the mint establishments into one, instead of adding another to the list.

ONLY ONE MINT ESTABLISHMENT REQUIRED.

Such a measure would relieve the government from a heavy burden, and, possibly, yield some revenue. It would at the same time be a benefit to every locality, including even those where the Mint, &c., are now placed, because the charges to depositors for refining, coinage, &c., might be reduced; and if it should be located where the bullion, whatever may be its form, is now taken, in the natural course of trade the cost of transportation would be practically eliminated from the calculation.

Very respectfully,

ANDREW MASON, *Melter and Refiner.*

Hon. CHARLES J. FOLGER, *Treasurer, &c.*

Notes on mint bill by United States Assay Office, New York.

Add to section 3, in reference to duties of Director, the following: "It shall be his duty to receive all accounts accruing in the mints and assay offices, and, after examination, to certify the balances and transmit the accounts, with the vouchers and certificate, to the First Comptroller for his decision thereon." (See section 3 revised bill.)

In the same section: In place of "unparted, standard, and refined," insert the words "all kinds of."

In same section: In reference to duties of treasurer, after the word "Mint," insert the words "as a deposit," so that it will read: "He shall receive all bullions brought to the Mint as a deposit."

NOTE.—Brought to whom?—I see no provision in the bill directly authorizing any private person to bring bullion or gold dust to the Mint for assay, refining, and coinage. Nor is there any such authority to be inferred, unless from the use of the words "depositor," &c. Should there not be a section or phases specific upon this point like section 46?

In same section: Insert, in reference to duties of treasurer, "He shall present monthly to the Director of the Mint, according to such forms as shall be prescribed by him, an account of the ordinary receipts and disbursements of the Mint; and of the bullion accounts, quarter-yearly, for the purpose of being adjusted and settled."

In same section: With reference to duties of assayer, insert the words "and bullion generally," so that it will read, "he shall also make assays of coin and bullion generally whenever instructed to do so by the superintendent."

In same section: Omit the following: "He shall also have authority to assay at his discretion such ores as may be presented for that purpose, and a charge covering the expenses of the process shall be collected of the owner." (See sections 4, 5 of revised bill.)

Section 11. The objections to changing the weight of the silver dollar are entitled to serious consideration. (See section 15.)

Section 18. In reference to wastage, are two-thousandths enough to cover the melter and refiner's responsibility and risk? (See section 44 of revised bill.)

Add to section 21. Relative to the bullion fund, "Payments in advance may be made to the depositor under regulations established by the Director with the approbation of the Secretary of the Treasury." ("I doubt." FOLGER.) (See section 48.)

Section 24. In reference to paying all moneys into the treasury on charges and deductions from gold and silver bullion, add the following: "*Provided*, That all losses arising from the sale of 'sweeps' or from wastage shall be offset by the gains arising from any surplus of the precious metals, in the settlement of the melter and refiner's and the coiner's accounts, (the balance being provided for from the account of incidental and contingent expenses,) for the purpose of keeping the bullion fund intact." (See section 54 of revised bill.)

Section 32. After the word "fineness" insert the following, "or that of the deposits after melting," so that it shall read: "that, at the option of the depositor,

gold or silver may be cast into bars or ingots of either pure metal or of standard fineness, or that of the deposit after melting, as the owner may prefer," &c. (See section 20 of revised bill.)

Section 35. In reference to nickel coinage, are not the present bronze coins preferable?

Section 44. In reference to officers of assay office in New York. The separation of the United States assay office from the independent treasury will secure direct, responsible supervision of the treasurer's department. By keeping distinct the offices of superintendent and treasurer, (or deputy treasurer,) the two act as checks on each other. The superintendent and the present melter and refiner have never had assistants. The salaries should be fixed by law. The other provisions, generally, of the act of 1853, establishing this office, seem appropriate. (See sections 55, 26 of revised bill.)

Section 55. In reference to the repeal of all acts inconsistent with the provisions of this act. Why the need of this action? The statute last passed always prevails. In whatever it is repugnant to a former statute it is the law to the exclusion of the former act; while a former clause of repeal may strke out parts of acts which it is not wished to do away with. (See section 71 of revised bill.)

Officers of branch mint at San Francisco to Secretary of the Treasury.

OFFICE OF SUPERINTENDENT UNITED STATES BRANCH MINT,
San Francisco, California, February 4, 1870.

SIR: Inclosed herewith please find copy of the "Bill revising the laws relating to the mints, and assay offices, and coinage of the United States," with such suggestions as have been agreed upon by the officers of this branch, written upon slips and pasted opposite the sections to which they respectively refer.

COINAGE CHARGE SHOULD BE REPEALED—FREE MINTAGE.

It will be observed that the officers of this branch are of the opinion that the seigniorage or coinage charge ought to be *entirely repealed* without reducing the weight of the coins; and further, that in the thirty-fou... section of the proposed law, (with the exception of the treasurer,) they venture with great deference to recommend (on the suggestion of the able and experienced assayer of this branch) that the entire charge for refining bullion deposited for coinage be abolished, or in other words that the government confer upon the mining interests of the country the benefit of a free mint. Some of the general reasons for this recommendation may be briefly stated as follows:

1. It is believed that the policy of our government should tend to the retention of American bullion at home rather than allow the difference between the mint charges of our own and foreign countries to operate as a premium to encourage its shipment abroad.

2. That such a modification of the law would to some extent stimulate mining enterprise, encourage an important but poorly paid branch of industry, and increase our annual product of the precious metals.

3. That this charge, by raising the mint value of bullion above its market value for shipment, would increase our coinage, swell the volume of specie in circulation, stimulate the exporting of other commodities than gold and silver, to adjust balances of trade, and in some slight degree facilitate the resumption of specie payments.

4. The entire cost of refining the total bullion product of the country, say thirty-six millions, would not exceed $200,000, and we hazard the opinion that the advantages to be derived would many times exceed that sum.

Very respectfully, your obedient servants,

O. H. LA GRANGE, *Superintendent.*
O. D. MUNSON, *Assayer.*
J. B. HARMSTEAD, *Coiner.*
J. P. COCHRAN, *Melter and Refiner.*

Amendments suggested by officers of San Francisco Branch.

Section 3, article 2. The assayer, the melter and refiner, and the coiner of this branch mint desire to suggest that being responsible on their bonds for the integrity and efficiency of the employés in their several departments, they should be allowed to recommend such employés, subject to the approval of the superintendent.

The superintendent dissents on the ground that if thus practically deprived of the appointing of workmen he would have no power to enforce necessary regulations and maintain harmony between the several departments.

Section 3, article 3. Use the word "compute" instead of the word "estimate" in the ninth line of article 3, section 3; and strike out the word "superintendent" in the last line of same section. [Section 4 of revised bill.]

Section 5. Add: "In case of such absence of the superintendent he may designate his chief clerk to act in his place." [See section 9 of revised bill.]

Section 8. 1st. The operative officers at the San Francisco branch should receive at least $4,000. 2d. Wages allowed to workmen should be determined by the superintendent, subject to the approval of the Director. 3d. Insert the word "treasurer" after the word "superintendent" on the fourth line, and erase before "assayers" on fifth line. [See section 12.]

Section 9. Insert in last line in reference to alloy of silver the word "tenth" in place of "half." [See section 13 of revised bill.]

Section 11. Would not the proposed change in the weight of the silver dollar disturb the relative value of all our coinage, affect our commercial conventions, and possibly impair the validity of contracts running through a long period? Might not the dollar be retained as a measure of value, but the coinage of the piece for circulation be discontinued? [See section 15 of revised bill.]

Section 14. Strike out all after the words "shall be," in the ninth line, and insert: "Shall be defaced and delivered to the melter and refiner as standard bullion, to be again formed into ingots and recoined." [See section 41 of revised bill.]

Section 16. Provide for deliveries and accounting between treasurer and melter and refiner. [See section 43 of revised bill.]

Section 20. Erase the word "Director," and insert the word "superintendent" in fourth line. In the fifth line strike out "been brought to the mint," and insert "became fit for coinage." [See section 46 of revised bill.]

Section 21. In reference to bullion fund, strike out last line, and insert "may at any time increase or diminish such deposits." [See section 48 of revised bill.]

Section 22. Insert the word "fineness" after the word "standard," in the nineteenth line. [See section 49 of revised bill.]

Section 29. Should not purchases be approved by the Secretary of the Treasury as well as by the Director? Is not the reference to profits in this section inconsistent with the reduction in value of the silver dollar proposed in section 11? [See section 28 of revised bill.]

Section 34. Substitute the following, viz: *"And be it further enacted,* That the only charge by the mints to the depositors shall be as follows: For copper introduced for alloy, and for silver used for the alloy of gold for coinage; for casting bullion into unparted bars; and for making fine gold and silver bars. The rate of these charges shall be fixed for the several mints from time to time by the Director, with the concurrence of the Secretary of the Treasury, so as to equal, but not to exceed the actual expense to the mint for metals and labor in each case aforementioned; and bullion so base as to be unsuitable for the operations of the mint may legally be rejected by the treasurer." [See sections 25, 21, of revised bill.]

Superintendent of branch mint at San Francisco to Secretary of the Treasury.

OFFICE OF SUPERINTENDENT UNITED STATES BRANCH MINT,
San Francisco, California, February 7, 1870.

SIR: Permit me in addition to the general suggestions made by the officers of this branch, to say that personally I am earnestly in favor of any measure that can be secured, having a tendency to bring the cost of refining and coining bullion in this country into such a relation with the cost of those operations in other countries as will abolish the premium now practically paid to exporters of our uncoined gold and silver.

Very respectfully, your obedient servent,

O. H. LA GRANGE, *Superintendent.*

Hon. GEO. S. BOUTWELL,
Secretary of the Treasury, Washington, D. C.

Assayer of branch mint at San Francisco to Secretary of the Treasury.

ASSAY OFFICE UNITED STATES BRANCH MINT,
San Francisco, California, February 11, 1870.

SIR: Allow me to ask your attention to the changes and additions herewith suggested to Section 18, in the "Bill revising the laws relative to the mints," &c., accompanying this.

The old law allows two-thousandths of the whole amount charged to these officers for wastage, and an officer has once assumed that he was entitled to all that he could save embraced within this allowance.

Is it not important, as the law is being changed, to provide against a repetition of such an assumption?

Respectfully, your obedient servant,

O. D. MUNSON.

Hon. GEO. S. BOUTWELL,
Secretary of the Treasury, Washington, D. C.

Assayer of branch mint at San Francisco to Mr. Knox.

ASSAY OFFICE UNITED STATES BRANCH MINT,
San Francisco, California, February 12, 1870.

SIR: I herewith submit the following suggestions to section 18, in reference to wastage, for your consideration:

In the eighth line substitute the word "accounts" in the place of "case."

In the ninth line strike out the words "and silver," and add after the word "gold," "and one thousandth of the whole amount of silver."

In the tenth line, after the word "settlement," add: "calculated separately;" also, substitute the word "account" for the word "case," in tenth line.

And in the last line, after the word "treasurer," add the words "calculated separately."

Something like the following, I think, should be added: "And if any bullion has accumulated in the hands of these officers by reason of the legal allowance for wastage, it shall be their duty to deliver the same to the treasurer, on an order from the superintendent, to be credited to the profit and loss account of the mint." (See section 44 of the revised bill.)

These alterations have presented themselves to my mind since our suggestions to the bill were forwarded.

Respectfully, and yours truly,

O. D. MUNSON.

JOHN J. KNOX, Esq.,
Deputy Comptroller, Treasury Department, Washington, D. C.

Assayer of the branch mint at Denver to Mr. Knox.

UNITED STATES BRANCH MINT,
Denver, February 7, 1870.

SIR: Your favor of the 22d ultimo, asking me to examine the new mint bill which was inclosed, and to make any suggestions that might occur to me, was received on the 4th instant.

In reply I would state that while I heartily concur in the general features of the bill, I will suggest that some parts of it be changed.

CHARGES OF THE ASSAY OFFICE.

Section 34 provides that the charges by mints and assay offices "shall be fixed so as to equal, but not to exceed in their judgment, the *actual expense* to the Mint of the materials and labor employed in each of the cases aforementioned." If you mean by this, that the charges in each institution are to equal the *total expenses*, including salaries, wages, &c., of that insitution, then I think the charges are much too high; so high, in fact, that United States mints and assay offices will have but little to do. The amount received as charges at the mints and assay offices will not pay one-fourth of the expenses; and it is my opinion that the charges should be reduced still lower, instead of being increased. The fact that gold can be shipped out of the country to be coined at a profit, is evidence that mint charges in this country are too high. (See section 62 of revised bill.)

SALARIES OF OFFICERS AND CLERKS.

In section 50, relating to the Denver branch mint, it says: "And the assayer may employ two clerks and as many workmen and laborers, under the direction of the Secretary of the Treasury, not exceeding six in number, as may be required." This

would be reducing the number of workmen and laborers in this institution nearly one-half, as we have ten on the pay-roll for workmen now, (including one day and two night watchmen.) The number specified in the bill is entirely too small, as six cannot do the work so as to allow deposits to be returned in time to satisfy the wants of this community. It has been the custom to return deposits the day after they are deposited here, and, as I said before, this could not be done if we were allowed but six workmen and laborers. We have also to consider that for the past three years the business of this branch has been steadily increasing, as the following statement will show. There were received in the fiscal year ending June 30, 1867, 180 deposits; in 1868, 493, and in 1869, 1,259 deposits, and the prospects are there will be a greater number of deposits this season than ever before.

It does not seem to me to be any more necessary to prescribe *by law* the number of workmen and laborers at this branch and at Boisé City, than at the New York assay office, Philadelphia Mint, or of the other mints. Why not allow this institution to be as useful as it may be by allowing the necessities of the case to govern the action of the Director and the Secretary of the Treasury, instead of making it necessary to get a special act of Congress to allow an increase of *even one* workman? The same may be said in regard to the number of clerks.

In the same section the salary of the two clerks is not to exceed $1,800 each. I would suggest that the question of the salary for the clerks be left subject to the control of the Director and the Secretary, the same as it is with the other mints. (See section 60 of the revised bill.)

Hoping that you will make the changes indicated, and thanking you for thus favoring me,

I have the honor to be, with great respect, your obedient servant,

JACOB F. L. SCHIRMER,
Assayer United States Branch Mint, Denver, C. T.

Hon. JOHN JAY KNOX, *Deputy Comptroller.*

Solicitor to the Secretary of the Treasury.

TREASURY DEPARTMENT, SOLICITOR'S OFFICE,
March 31, 1870.

SIR: I have the honor to acknowledge the receipt of the draught of a "Bill revising the laws relating to the mints, assay offices, and coinage of the United States," referred to me, on the 27th of January last, by Hon. J. F. Hartley, Assistant Secretary, for examination, with special reference to[1] sections 40 to 43, inclusive, and to return the same, marked "A," with such alterations and amendments as I have thought necessary to be made.

I am, very respectfully,

E. C. BANFIELD,
Solicitor of the Treasury.

Hon. GEORGE S. BOUTWELL,
Secretary of the Treasury.

First Auditor to Secretary of the Treasury.

TREASURY DEPARTMENT, FIRST AUDITOR'S OFFICE,
February 10, 1870.

SIR: In compliance with your reference of a "Bill revising the laws relative to the mints, assay offices," &c., for examination, with suggestions and amendments, I respectfully submit the following remarks:

As far as I feel authorized to express an opinion, I consider the bill an important improvement upon the present system regulating the mints, as it simplifies, by reducing into one act, what is now embraced in several, with some complexity in their operations. Its provisions are so clearly expressed that they obviate the doubtful constructions in some of the existing acts, and leave the execution of the law exempt from divided opinions. The unity in the organization under this bill will facilitate the operations of the mints by bringing them under the authority of one Director, and thereby having a uniformity in all. It defines the duties of all the officers, and holds them to a proper accountability, in which is found the necessary protection of all the rights and interests, public and private, subject to their trust.

[1]The recommendations of the Solicitor were adopted in the construction of sections 63 to 67 inclusive of the present bill.—J. J. K.

I think the bill might be improved by some alterations, which I have made in pencil, in some of the sections.

With these remarks and amendments I return the bill.

With great respect, your obedient servant,

T. L. SMITH, *Auditor.*

Hon. GEORGE S. BOUTWELL,
Secretary of the Treasury.

B.—CORRESPONDENCE RELATIVE TO THE BILL WHICH WAS TRANSMITTED BY THE SECRETARY OF THE TREASURY TO THE SENATE OF THE UNITED STATES ON THE 25TH OF APRIL, 1870.[1]

Hon. George Harrington, late Assistant Secretary of the Treasury, to Mr. Knox.

WASHINGTON, *May 27, 1870.*

MY DEAR SIR: Permit me to express the gratification with which I read your report with accompanying draught of a bill, intended to give effect thereto, upon the necessity of reorganizing our mint system.

NECESSITY OF REVISION AND REORGANIZATION.

There is no branch of the Treasury Department that has been so neglected as that of which your report treats, and none that so seriously requires revision; it was a want well known during the rebellion; but one that could not be attended to during that time. There is, in fact, no system as such, and no proper responsibility. Efforts have heretofore been made to effect reform; but they have been partial and unsatisfactory.

The obstacles to satisfactory legislation have been two-fold: First, that every attempt at investigation has been partial and superficial, manifest upon its face, and consequently has failed to convince Congress of any real necessity for remedial legislation; secondly, the animus of such investigations has not unfrequently been to engraft upon the system some idiosyncrasy of the author, which, not being responsive to the needs of the service, received no support from the intelligent expert; and hence failure.

Your report, I am glad to see, treats the subject in the broadest and most comprehensive manner, and your desire to improve the system is demonstrated by your calling to your aid those most familiar with its defects and most competent to suggest the proper remedy. Patterson, Peale, and Snowden I personally know are practically as well as theoretically familiar with the whole subject. A cursory examination of the bill is sufficient to commend it to any one at all conversant with mint affairs; its careful perusal demonstrates unmistakably the care and research with which the bill has been framed, and which, if enacted into law, will give to our mint establishment that unity so necessary to its advantageous and economical administration, and place it upon a par with those of the most advanced nations I speak, as you are aware, from official knowledge of the disjointed condition of this important branch of our service to which I have given no little thought, and I cannot refrain from expressing to you the pleasure with which I perused your intelligent report and the provisions of the bill intended to give your views effect.

With great respect, yours,

GEO. HARRINGTON.

Hon. J. JAY KNOX,
Deputy Comptroller of the Currency.

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[1] The bill was transmitted to the Senate accompanied by the following letter from the Secretary of the Treasury:

"TREASURY DEPARTMENT, *April 25, 1870.*

"SIR: I have the honor to transmit herewith 'A bill revising the laws relative to the mint, assay offices, and coinage of the United States,' and accompanying report. The bill has been prepared under the supervision of John Jay Knox, Deputy Comptroller of the Currency, and its passage is recommended in the form presented. It includes, in a condensed form, all the important legislation upon the coinage, not now obsolete, since the first mint was established, in 1792; and the report gives a concise statement of the various amendments proposed to existing laws, and the necessity for the change recommended. There has been no revision of the laws pertaining to the Mint and coinage since 1837, and it is believed that the passage of the inclosed bill will conduce greatly to the efficiency and economy of this important branch of the government service.

"I am, very respectfully, your obedient servant,

"GEO. S. BOUTWELL,
"*Secretary of the Treasury.*

"Hon. JOHN SHERMAN,
"*Chairman Finance Committee, Senate of the United States.*"

Hon. W. E. Chandler, late Assistant Secretary of the Treasury, to Mr. Knox.

WASHINGTON, D. C., *May 15, 1870.*

DEAR SIR: I thank you for sending me a copy of your report and proposed bill for a revision of the mint laws.

NECESSITY OF THE PROPOSED REVISION.

The necessity of such a revision has been apparent to every one connected of late years with the Treasury Department The work has been admirably performed by you. You have happily secured and availed yourself of the suggestions of others, while impressing upon the codification that unity and completeness which can only result from the operations of one thoroughly informed mind. If the law is enacted it will result most beneficially.

The abolition of the coinage charge, and the adoption of the metrical system, with a view to an international system of coinage, are so clearly apparent that I cannot believe that Congress will delay action much longer.

I am much pleased with your report as a compendious statement of useful information connected with the coinage system. The table on page 26, showing the weight, fineness, and tolerance of all the United States coins, together with the amount in which such coins are legal tender, is especially valuable. I believe the very best results will follow from your work.

Very respectfully, yours,

WM. E. CHANDLER.

JOHN J. KNOX, Esq.,
Deputy Comptroller of the Currency.

Mr. Patterson to Mr. Knox.

PHILADELPHIA, *April 29, 1870.*

DEAR SIR: I have read your report in the North American of to-day and cannot help dropping a line to express the satisfaction it gives me. All the points of reform appear to have been reached. Please send me a copy of the bill, also of your report, when officially printed.

I do not agree about abolishing the coinage charge. If we come to international coinage, I am satisfied that it will be insisted upon that the contracting parties shall have a uniform rate of charge, else all the coinage will be precipitated upon the country which works for nothing. We ought not to abolish what we will have soon to re-establish. However, I will not discuss that now.

Yours, truly,

R. PATTERSON.

JOHN JAY KNOX, Esq.,
Deputy Comptroller.

Commissioner of Mining Statistics to Mr. Knox.

OFFICE OF THE ENGINEERING AND MINING JOURNAL,
New York, May 28, 1870.

DEAR SIR: I have received the copy of your report on the proposed codification and reform of our mint laws, with the accompanying bill, and perused it with great interest. I regard it as a very thorough and well-considered paper, and I hope its recommendations will not fail of the attention at the hands of Congress which they deserve. The introduction of metrical weights and the door opened by your suggestions to the adoption of a perfectly metrical system of coinage, are features which especially commend themselves to me. I think these are true and practical steps toward a permanent international coinage, a consummation much to be desired, though not worth the sacrifice of our own almost perfect system, which some have over-hastily urged. Through all the debates on this subject which have taken place during the last three years it has been evident that the United States government, as such, had no positive opinion to present. It is time for us to have a mint bureau in the Treasury Department at Washington, with a chief, whose business it will be to study, understand, and definitely recommend the necessary measures in his department. I see reason to believe that the bill you propose will give us just this central, competent head; and therefore, if for no other reasons, I should be in favor of it.

Yours, truly,

R. W. RAYMOND.

JOHN JAY KNOX, Esq.,
Deputy Comptroller of Currency.

Chief coiner of the Mint to Mr. Knox.

MINT OF THE UNITED STATES,
CHIEF COINER'S DEPARTMENT,
Philadelphia, May 21, 1870.

MY DEAR SIR: I have delayed writing, as suggested by you, on the matter of allowances, &c., in the bill now before the Senate committee, for the reason that I expected to be in Washington and confer with you in person, which would be much more satisfactory. I find it impossible, however, to leave my post at the present time, and shall therefore have to content myself with this mode of communication.

As the Director of the Mint, who has its general supervision under charge, has discussed the bill in all its details before it was transmitted to the Senate, I do not esteem it my duty, nor would it be courtesy to him or to my brother operative officers, to discuss, at this time, any of its provisions not having direct reference to the department under my charge. I shall therefore confine my observations to one or two points having reference thereto, and which, in my judgment, should be amended.

The principal of these is the allowance on single pieces and on deliveries in bulk, and my only object in taking exception to the allowances named in the bill is that I fear it will be very embarrassing, if not impracticable, to operate under its provisions.

The object in view by a small allowance on single pieces is to prevent, by carelessness or fraud, a coinage that would be below the standard weight. The main check upon this is in the allowance upon drafts, which should be made as close as can be consistent with the practical operations of the departments. Still, I think the allowances, as named in the bill, on deliveries in bulk are too close.

It is highly probable that the deliveries would be uniformly within even its restricted limits—they would certainly be, taking the workings of this department within the past year or two as a criterion—but under a large coinage it might occasion embarrassment, without any practical advantage.

We do not use in the receiving room, or in any department except in the assay department and adjusting room, so small a weight as the .005 or half-one-hundredth of an ounce, and I can assure you it requires a very delicately constructed balance, large enough to use in the deliveries of coin, that will respond promptly under so small a weight; and in the adjustment of heavys and lights, preparatory to delivery, it requires the most delicate and careful manipulation to so combine the two as to come uniformly within so small an allowance.

As a matter of artistic skill it could be done, but our coinage establishments are manufactories, and rules that would operate where mathematical results can be had should not be applied to them.

I unite with you in the desire to see adopted the most stringent regulations for the prevention of fraud or criminal carelessness in all our minting establishments; but these rules should not be made so embarrassing as to become oppressive, nor should they, as in the allowance on single pieces, be made so as to be snares, liable to entrap an honest and faithful officer consistently discharging his duty.

An operative officer has to depend in a large degree (in spite of all watchfulness and care on his part) on the faithfulness, attention, and skill of those under him, as well as upon the accuracy of the machinery and appliances employed.

The least thoughtlessness, neglect, or want of skill in an adjuster, or accuracy in a balance, may pass a coin outside the legal limit, that would find its way into the pyx, and stand in judgment against him at the annual assay.

The commissioners, with but few exceptions, are unfamiliar with the operations of coinage, and if unfortunately the piece was light they might draw unfavorable inferences of an officer's capacity, if not his integrity, although the delivery out of which the piece was taken may have been of standard weight, and it is the only piece out of the legal limits.

This was the case in a delivery made a year or two since, when it was customary to weigh the coins before placing them in the pyx. One double-eagle was found to be one-thirty-second of a grain too heavy, and on an examination it was ascertained to be the only piece in the $400,000 composing the delivery that was not accurately within the legal limits. This occurred when the allowance was one-half a grain upon a single piece. This risk is increased in almost exact proportion as you reduce the allowance.

TOLERANCE ON SINGLE PIECES.

What practical good will result from the very small allowance named in the bill on single pieces? All that is desirable to be obtained is that the pieces shall conform, as near as may be practically convenient in the workings, to the standard weight.

The check is in the limitations and restrictions in delivery in bulk, as I before

remarked. The allowance named in the bill on the three-dollar, quarter-eagle, and one-dollar piece, is, in my judgment, entirely too small.

As a matter of skill, we can adjust ten, one hundred, or one thousand of these pieces within the limits; but I assert unhesitatingly that in the every-day operations of coinage, with all the care and skill obtainable, there will be coins outside the legal limit where it is made so small.

You know that after adjustment the planchet must be milled and cleaned preparatory to coining. Allowance must therefore be made in adjustment for the loss in these operations. With a one-sixth, and certainly the one-twelfth, of a grain to go upon, it cannot be done on a large scale with unvarying certainty. And what is the penalty an officer is to suffer, under the bill, for any departure from this nice adjustment? The fact is to be reported to the President for such punishment as he may see fit to impose within the limits of disqualifying him from holding his office. The public, not understanding how trifling the error and how impossible to avoid it, will take up the whisper, and the reputation of an honest lifetime may be blasted. The operation of so close an allowance on single pieces would, I fear, only serve as a trap into which some faithful and honest officer might fall, without subserving any valuable end.

The act of the English mint, to which reference is made, has never been tried, and I assert, without fear of contradiction, that the "remedy allowance" on the silver penny and on one or two other coins, is not only impracticable but absurd, unless their machines for adjusting are far more accurate and reliable than any we have been able to obtain—human and mechanical—and I don't believe they are.

I consider their graduated "remedy allowance" as beautiful in theory but impracticable in the every-day manufacturing of money, and looks very much as if it had been proposed by some one who never handled a pair of balances or saw a planchet adjusted. I speak from long experience and observation, and very much fear, if the allowances named in the bill now before the Senate are not increased, the coining departments in our mints will be greatly embarrassed without any good results following. On invitation, I had a long interview on this subject with Mr. Robert Patterson, who was connected in an important relation with the Mint for nearly a quarter of a century. He fully agrees with me in all the details presented in the accompanying schedule, as does also Mr. Dubois, assistant assayer. Ample protection is given to the government and people, while at the same time the officers charged with the execution of coinage have a sufficient tolerance in the discharge of their duties.

TOLERANCE IN BULK.

I have named .01 ounce on all drafts in deliveries; it would be better if it were .02 ounce on all drafts of $5,000.

At present we can very well work within the .01 ounce, but in a great pressure it might be found embarrassing, without much advantage at any time arising therefrom.

I recommend that the allowances on dimes be made one grain, which will obviate the expense and delay of adjustments, while, as before stated, the limit on drafts in deliveries would prevent any evil arising from this increase of tolerance on the single pieces. (See sections 38 and 39 of proposed bill.)

REDUCTION OF WASTAGE APPROVED.

I concur in the proposed reduction of the allowance for wastage named in the bill, as far as relates to this department. The allowance at present is unnecessarily liberal, and might be taken advantage of by an unfaithful officer. (See section 44 of revised bill.)

You deserve and should receive credit for the patient labor and ability manifest in the preparation of the bill, and I am exceedingly sorry that I cannot fully concur in all of its provisions, and especially in such of its details as I have indicated.

If, on examination, you agree in deeming it advisable to make the changes I have named, and which I believe to be important as relates to the coining departments of the several mints, please have the bill so amended while it is in the Senate committee.

At all events let me hear from you at your earliest convenience.

I am, with sincere respect, very truly, your friend,

A. LOUDON SNOWDEN,
Chief Coiner.

JOHN JAY KNOX, Esq.,
Deputy Comptroller, Treasury Department.

ALLOWANCE ON SINGLE PIECES.

Gold.	Grains.	Silver.	Grains.
Double-eagle	½	Half-dollar	1
Eagle	½	Quarter-dollar	1
Half-eagle	½	Dime, to save adjusting	1
Three-dollar	½		
Quarter-eagle	½		
Dollar	½		

ALLOWANCE ON DRAFTS.

Gold.	Ounces.	Silver.	Ounces.
Double-eagle (on $5,000)	.01	Half-dollar (on $1,000)	.02
Eagle (on $5,000)	.01	Quarter-dollar (on $1,000)	.02
Half-eagle (on $5,000)	.01		
Three-dollar (on $3,000)	.01	Dime (on $100)	.01
Quarter-eagle (on $5,000)	.01		
Dollar (on $1,000)	.01		

E. B. Eliott to Mr. Knox.

TREASURY DEPARTMENT,
Washington, D. C., June 10, 1870.

DEAR SIR: In conformity with your request I have prepared, and give herewith, a statement of certain facts and views pertaining to the bill now before the Senate for the revision of the mint and coinage laws of the United States.

"TOLERANCE" OR "REMEDY" OF THE MINT IN DIFFERENT COUNTRIES COMPARED.

The first point to which I would call attention is a comparison of the rates of "tolerance" or deviation from the legal weight and fineness of coins allowed to the coiner in the mints of the United States and of certain other countries.

"TOLERANCE" OF FINENESS.—GOLD COINS.

The tolerance of fineness in excess or defect as regards gold coins issued from the Mint of the United States under the existing laws, is 2 parts in 1,000; under the provisions of the new bill it would be 1 part in 1,000.

Under the existing laws, therefore, gold coins may not be issued from the Mint if the rate of fineness exceeds 902 thousandths, or fall short of 898 thousandths; under the provisions of the new bill the limits are 901 and 899 thousandths; the standard rate of fineness in either case being 900 thousandths.

In many of the countries of the world (as England, France, Belgium, Italy, Germany, Spain, &c.) the tolerance of fineness of gold coins, in excess and defect, is 2 per 1,000. In the Netherlands it is 1 per 1,000. In Denmark it is about $\frac{7}{8}$ (or 0.868) per 1,000. In Russia no rate of tolerance for fineness of gold coins is established. In Sweden the rate is 3 per 1,000, but the Director in Chief of the mint and assay office, in his communication to the Royal (British) Commission on International Coinage, states that "in fact the newly minted ducats are never defective to the extent of one-thousandth part in weight, and scarcely one-half thousandth part in fineness." In Great Britain the coinage act of 4th April, 1870, reduced the tolerance on gold coins from $2\frac{29}{32}$ to 2; and by the same act it is made "lawful for her Majesty, with the advice of her privy council, from time to time, by proclamation," "to *diminish* the amount of remedy" "in any coin."

ACTUAL DEVIATION IN THE FINENESS OF GOLD COINS.

The official annual assays of the coinage of the United States made in the years 1869 and 1870, shows, in respect to the gold coins and bars assayed in the year 1869, a deviation of 0.13 thousandths in defect from the standard, alike for the mints of Philadelphia and San Francisco, the average fineness for each mint being 899.87 thousandths. In the year 1870 the average of the assays of gold coins and bars in each of these mints show no measureable deviation from the standard, the average fineness being found to be 900 thousandths. [1]

[1] Manuscript reports of annual assay of the mint, 1869 and 1870.

According to the Journal des Débats of 13th November, 1866, the actual fineness of the French gold coinage was 898 and a large fraction; but according to the Moniteur, November 20, 1866, it was 899.6—both being below the American average; the former considerably below, although within the limits of tolerance.

"TOLERANCE" OF FINENESS.—SILVER COINS.

In the case of silver coins the existing tolerance of fineness is 3 per 1,000, both in excess and defect. In the prepared bill the tolerance of silver coins is reduced to $2\frac{1}{2}$ per 1,000.

In France, Belgium, Italy, and Switzerland the tolerance in the case of the price of 5 francs (silver) is 2 per 1,000; and in respect to all other silver coins of these countries the tolerance is 3 per 1,000. In Prussia the tolerance of silver coins is 3 per 1,000; in England it is 4 per 1,000. The rate proposed does not differ greatly from that of France.

ACTUAL DEVIATION IN THE FINENESS OF SILVER COINS FROM THE LEGAL RATE.

The actual deviation of United States silver coins from the legal standard as to fineness, as indicated by the annual official assays in 1869, was for the Philadelphia Mint 0 55, and for the San Francisco Mint 0.25 thousandths in excess of the standard. In 1870 the silver coins and bars of the Philadelphia Mint which were assayed were 0.2 thousandths in excess; and the coins of the San Francisco mint 0.4 thousandths in excess of the standard, as will be seen from the following table:

Table showing the fineness of bars and coins of gold and silver issued by the mints of the United States at Philadelphia and San Francisco, according to official assays made at Philadelphia in February of the years 1869 and 1870.

Assay of 1869.	Fineness.		Deviation from standard.	
	Range.	Average.	Average in excess.	Average in defect.
	Thousandths.	*Thousandths.*	*Thousandths.*	*Thousandths.*
Gold:				
Philadelphia Mint	899.8 to 899.9	899.87	.....	0.13
San Francisco Mint	899.8 to 900	899.87	.....	0.13
Silver:				
Philadelphia Mint	900 to 901	900.55	0.55	.....
San Francisco Mint	900 to 900.6	900.25	0.25	.....

Assay of 1870.	Fineness.		Deviation from standard.	
	Range.	Average.	Average in excess.	Average in defect.
	Thousandths.	*Thousandths.*	*Thousandths.*	*Thousandths.*
Gold:				
Philadelphia Mint	900 to 900	900	.....	.....
San Francisco Mint	899.9 to 900.2	900	.....	.....
Silver:				
Philadelphia Mint	899.8 to 900	900.2	0.2	.....
San Francisco Mint	899.8 to 900.8	900.4	0.4	.....

The legal standard of fineness, both of gold and silver coin, is 900 thousandths.

PRACTICABILITY OF A DIMINUTION IN THE RATE OF TOLERANCE OF FINENESS.

It is desirable that the tolerance of fineness, or the deviation allowed by law from the standard fineness, should be as small as practicable; and also that the deviation in excess or defect in one delivery should be compensated by a corresponding defect or excess in the next.

Although the rate of tolerance as to the fineness of gold coinage adopted in a large number of countries is 2 parts in 1,000, there is reason to believe that there is a tendency to narrow the range, and that to narrow it is feasible. A diminution of the tolerance as to fineness may be accomplished in one of two ways: either by diminishing it with respect to each mass of metal coined, or by requiring that the deviations in excess or defect from the legal standard of fineness, in different masses of metal which may be coined, shall nearly compensate.

The comparatively narrow range of tolerance of fineness adopted for coinage in the Netherlands and in Denmark, together with the result of assays in the United States and elsewhere, indicates that a diminution of the tolerance to 1 part in 1,000,

as proposed in the bill, is feasible; and it is evident that the average of the deviation from the legal standard of several coinages taken together need not exceed a rate much smaller than this.

TOLERANCE OF WEIGHT IN SINGLE PIECES.—UNITED STATES TOLERANCE IN SINGLE PIECES GREATER THAN THAT OF LEADING COUNTRIES OF EUROPE.

As regards the tolerance of weight, or the deviation from the standard, which is allowed to the coiner, I observe that with coins of smaller denomination than the double-eagle, the tolerance of weight, according to the laws of the United States, is considerably greater than the tolerance for coins of nearly corresponding value issued by the mints of France, England, and certain other countries.

For example, the tolerance of weight on the American gold eagle is one-half of a troy grain, equivalent to $32\frac{4}{10}$ milligrams, while the tolerance of the 50-franc piece of France (a coin of nearly equal value to the United States eagle) is only $16\frac{1}{10}$ milligrams; and that of English coin of two pounds sterling (also nearly equal to the eagle) $25\frac{9}{10}$ milligrams. Again, the tolerance on the United States half-eagle is $32\frac{4}{10}$ milligrams, while on the British sovereign it is only 13.0 milligrams; on the quarter-eagle, 16.2 milligrams, but on the half-sovereign only $6\frac{1}{2}$ milligrams; on the United States dollar, 16.2 milligrams, while on the gold 5-franc piece of France only 4.8 milligrams.

In the mint and coinage bill now before Congress, the values proposed for tolerance of gold coins are nearly in harmony with those adopted by France, Belgium, Italy, and Switzerland; and there appears to be no sufficient reason for so wide a range of deviation from the standard weight of coins as that permitted by the United States statutes.

With regard to our silver coins, as in the case of our gold coins, the tolerance or legal deviation from the standard is greater, in general, than with the silver coins of Europe. For instance, the tolerance in the case of the silver dollar of the United States is 97 milligrams, while with the five-franc piece of France it is only 75 milligrams. The tolerance in the case of the half dollar of the United States is also 97 milligrams, while that of the two-shilling piece of Great Britain is but 47 milligrams. The tolerance of the quarter dollar of the United States is 65 milligrams, while that of the shilling of Great Britain is somewhat less than 24 milligrams. The tolerance of the dime is 32 milligrams, that of the half franc $17\frac{1}{2}$ milligrams.

The tolerance proposed in the bill for the silver coins of the United States is not materially changed from that of the existing law. It is somewhat less in the case of the half dollar, and is the same with respect to the quarter dollar and dime.

RELATION BETWEEN THE TOLERANCE OF WEIGHT AND THE WEIGHT OF COINS.

It is a principle sufficiently well established, that the amount of "tolerance" of weight should have some definite proportion to the weight of the coin, and also to the weight of a mass of coins when delivered in bulk. The absolute deviation allowed to the coiner should be less on small pieces than on large; less on small deliveries of coin in bulk than on large; less on a small number of equal pieces than on a large number. A simple approximate rule, and one favorable to the coiner, would be to proportion the tolerance, or deviation alluded to, to the square root of the weight of the coin issued, whether singly or in bulk.

The tolerance for silver coins adopted in the United States is proportionately larger than the tolerance for its gold coins; for the alleged and sufficient reason that, while the weight of the gold coins is adjusted by hand, the weight of the silver coins receives no adjustment other than that given by machinery, and is, in consequence, less exact. It is, however, questionable whether the disparity between the rates of tolerance on gold coins and those of silver coins may not be too great; the latter being relatively about *four* times as great as the former.

The tolerance in the case of the coins of France, both gold and silver, bears some approximate relation to that of the rule above given of proportioning the tolerance to the square root of the weight; the proportionate tolerance of the silver coins of France, however, being in general about *two and one-half* times as great as that of the gold coins.

The rate of tolerance in the smallest coins, both of gold and silver, which would correspond to the square root of the weight, is somewhat larger than the rates adopted for the mints of France and Great Britain.

In the case of the five-franc piece of gold the tolerance of the French mint is smaller relatively than that demanded by the square root of the weight, the former being 4.8 milligrams, (or 3 per 1,000,) and the latter about 7.5, (or $4\frac{1}{2}$ per 1,000.)

The deviation allowed on the one-dollar piece should not be so large as on the twenty-dollar piece, nor so small as one-twentieth of the latter, but should be about one-fifth of the deviation allowed on the piece of $20. If the deviation allowed on the twenty-dollar piece is in the very reasonable proportion of 1 per 1,000, the

deviation on the part of the dollar should neither be *one* part per thousand nor *twenty* parts per thousand, but some value intermediate, (approximating the square root of 20,) as $4\frac{1}{2}$ parts per 1,000, (or $7\frac{1}{2}$ milligrams.) This proportion for the dollar-piece is somewhat larger than that proposed in the bill, ($3\frac{2}{10}\frac{3}{0}$ per thousand, or $5\frac{4}{10}$ milligrams,) and larger than that of the French gold piece of five francs, (3 per thousand, or 4.8 milligrams,) but it is much smaller than that of the United States dollar under the law now in force, (to wit, $9\frac{7}{10}$ per thousand, or 16.2 milligrams.)

The following statement, from the report of John Quincy Adams when Secretary of State, relative to the Mint of the United States when first established, is of interest:

"In the coins of the United States there is no allowance for what is called the remedy of weight, but assays of all coins issued from the mint are made, and if any of them are found inferior to the standard prescribed, to the amount of more than $\frac{1}{1}\frac{1}{4}\frac{1}{4}$ part, the officers of the mint by whose fault the deficiency has arisen are to be dismissed. This provision was adopted from what was stated in Mr. Hamilton's report to be the practice of the mint in England."

A carefully prepared table is appended, comparing the tolerance or remedy of weight, existing and proposed, of the gold and silver coins of the United States with those of Great Britain, France, Belgium, Italy, and Switzerland, and with the rates demanded by the theoretical law above stated. (See inclosure No. 2.)

COIN WEIGHINGS.

To apply, in practice, the tolerance proposed by the bill, even of the coins of the smallest weight, ought not, with proper scales and other appliances, to be a matter of difficulty. In the Mint of the United States we ought to be able to, and very probably do, weigh coins with a nicety that will favorably compare with weighings in European mints. In the annual reports of assay at the Mint, I observe the deviations in the weighing of single coins are given to the one-sixteenth of a grain. The smallest tolerance called for in the mint and coinage bill is one-twelfth of a grain, and the smallest deviation demanded on the assumption that tolerance shall be proportioned to the square root of the weight of the coins would be about one-eighth of a grain.

On the subject of the limits within which it is practicable to note deviations from the standard weight of the smaller coins, I inclose an important communication from Dr. B. F. Craig, chemist of the bureau of the Surgeon General, and who has paid special attention to weights and balances. (See inclosure No. 1.) According to this communication, deviations of a single milligram (or about one-sixtieth of a grain troy,) may, with proper balances, be readily ascertained.

TOLERANCE OF WEIGHT IN BULK.

As an additional guard to the public in securing uniformity in the weights of its coins, and conformity to the legal standard, the United States law very properly establishes a rate of tolerance of weight when a large number of pieces are delivered in bulk, much narrower than the rate imposed on coins taken singly. Certain countries of Europe (as Denmark, Spain, and, prior to the act of April 4, 1870, England) have legal provisions of a somewhat similar character. In Denmark, a deviation in defect of one delivery of coins is required to be compensated for by a deviation of equal amount in excess in the next delivery. Tolerance in bulk under the new bill is considerably smaller than under the existing law; the rates in the former being from about one-fourth to one-ninth the value of those in the latter. In the new bill the deviation in the case of deliveries or drafts of $5,000 is fixed at $\frac{1}{1}\frac{0}{0}\frac{0}{0}$ of an ounce. This is the case with double eagles, eagles, half eagles, and quarter eagles. When the "drafts" or deliveries are of the amount of $3,000, (as in the case of the three-dollar coins,) the tolerance is fixed at a somewhat lower limit, to wit, at three-fourths of the above amount; and when the "draft" is of the value of $1,000 (as in the case of the one-dollar gold piece) the tolerance is fixed at one-half of the first-mentioned amount, to wit, $\frac{5}{1}\frac{}{0}\frac{}{0}\frac{}{0}$ of an ounce—the principle being recognized that the smaller "draft" demands a somewhat smaller tolerance, but not smaller in full proportion to the reduction in the "draft." The proportional tolerance of weight of gold coin in bulk proposed in the bill is from $\frac{1}{3}\frac{}{0}$ to $\frac{1}{5}\frac{}{0}$ of the tolerance proposed on single pieces.

LIMIT OF WEAR.

Neither the existing law nor the proposed establishes a limit of wear or a value below which coins will cease to be current. In France the limit of wear is five-thousandths below the lower limit of tolerance. In England the least current value of coins is six and a fraction (6.0412) thousandths below the standard weight of coins. In some countries of Europe the lower limit of tolerance is, at the same

time, the limit of wear; as in the case of the German gold crown, two and one-half thousandths is at once the tolerance and the limit of wear.

A section on this subject fixing the limit of wear at a point not greatly exceeding the rate of tolerance is desirable; say, a limit of wear not exceeding the tolerance by more than one-fourth.

REDEMPTION OF MINOR COINS.

In Prussia provision is made for the regular redemption of minor coins at their full nominal value. Provision is also made for the conversion at par of small coins into larger when presented in sums not less in case of small silver coins than 20 thalers or 40 gulden, (say $15 United States gold,) and in case of copper coins in sums not less than 5 thalers, or 10 gulden, (say $3.75 United States gold.)[1]

The section of the bill relative to the redemption and exchange of the minor coinage is therefore supported by weighty precedent.

ABOLITION OF TROY WEIGHT IN THE MINT.

A commission of eminent men in Great Britain, appointed by authority of the Queen, has, as you are aware, within a few months unanimously recommended the abolition of troy weight for all purposes pertaining to the government, and especially as regards the operations of the Mint. This recommendation will doubtless soon receive the favorable action of Parliament, and then the United States will be almost the only one of the great powers of the world that will employ for the purposes of the Mint other weights than the metric.

I would urge that the present opportunity should not be lost for abolishing, by the provisions of the mint and coinage bill, the use of troy weights in our Mint. I think no objection will be raised to this change from any quarter. It seems to me important that it should be pressed upon the attention of Congress. This change being effected, the establishment of a simple relationship between the weight of coins and the metric weight will naturally and readily follow. [See tables on pages 26, 28, 30, and 32, in Senate Mis. Doc. No. 132.]

STAMPING WEIGHT AND FINENESS ON COIN.

It is desirable that the weight and fineness of coins be stamped on all coins of gold and silver. I would respectfully suggest that the following section on this subject be substituted for section 19 of the bill:

SEC. 19. *And be it further enacted*, That upon the coins of the United States there shall be the following devices and legends: Upon one side of each of said coins there shall be, in addition to the inscription United States of America, and the date of the coinage, an impression emblematic of liberty; and upon the reverse there shall be a designation of the value of the coin, a statement of its weight and fineness, and such other descriptive inscriptions as the Secretary of the Treasury shall hereafter direct.

THE SILVER DOLLAR—ITS DISCONTINUANCE AS A STANDARD.

The bill proposes the discontinuance of the silver dollar, and the report which accompanies the bill suggests the substitution, for the existing standard silver dollar, of a trade-coin of intrinsic value equivalent to the Mexican silver piaster or dollar.

If the existing standard silver dollar is to be discontinued, and a trade-coin of different weight substituted, I would suggest the desirableness of conforming to the Spanish-Mexican, silver, pillared piaster of 1704, in preference to that authorized by the Spanish law of 29th 1772, or by the Mexican law of 27th November, 1867.

The first-mentioned of these coins, that of 1704, contained, as nearly as may be, according to English assays, a weight of pure silver equivalent to 25 grams. The last-mentioned, that of 1867, and which is intended to be equivalent to that of 1772,

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[1] [German Coinage Convention (Müntzverein) of January, 1857.]

ART. 14, (part of.) No one in the countries of the contracting powers shall be required to take in small coin a payment equal to the smallest of the larger coins.

ART. 15. Each contracting power engages—

a. Never to reduce the settled value of its own silver and copper small coinage, and only to permit its being withdrawn from currency after a space of time of at least four weeks has been fixed for its redemption, and publicly proclaimed at least three months before its expiration.

b. When, in consequence of length of circulation and wear, the impression on such coins has become indistinct, to call them in by degrees for remitting at the same value at which they were put in circulation.

c. And also to change the small coinage of every kind, if required, for the large currency of the country, at certain of their pay offices to be indicated.

The sum fixed for exchange, however, must, with regard to silver small coins, not amount to less than 20 thalers or 40 gulden, and, with regard to copper small coins, to less than 5 thalers or 10 gulden.

contains of pure silver 24.441 grams. The existing silver dollar of the United States contains 24.056 grams (*i. e.*, 371¼ troy grains) of pure silver.

In the year 1704, by proclamation of Queen Anne, based on assays at the English mint, the Spanish and Mexican *pieces of eight* (or dollars) were declared to be each of the value of *four* shillings and *six* pence sterling. At this time, and until the year 1816, sixty-two shillings could be coined from a troy pound of standard silver, $\frac{11}{12}$ fine; consequently, the dollar of 4*s.* 6*d.* sterling was equivalent in value to 386.71 troy grains, or 25.059 grams, of pure silver. Of these dollars, there would, of course, be, four and four-ninths, in a pound sterling, (silver standard.) The sterling *par of exchange* from that time to the present day has been one pound sterling, equal to four dollars and four-ninths of a dollar although silver has ceased to be a standard in Great Britain, and has practically ceased to be a standard in the United States, gold taking its place. This dollar, divided into six shillings, became thenceforth the standard of lawful money in the American colonies of Great Britain.

By act of the Congress of the Confederation, passed 8th August, 1786, and by the ordinance of 16th October, 1786, a silver dollar was established as a unit of account, although *not coined*, containing of pure silver 375.64 troy grains, (or 24.3·8 grams.) This unit differed—as has been clearly pointed out by John Quincy Adams, in his able report as Secretary of State, in 1821, on "weights and measures"—from the true dollar of 1704 as defined by the proclamation of Queen Anne, by a deduction of two per cent. for estimated wastage in coining, and by assuming the fineness of the metal to be $\frac{11}{12}$, whereas the fineness of standard British silver was then, as now, $\frac{111}{120}$.

The law of 2d April, 1792, of the new Congress, which established the Mint of the United States, also fixed the contents of pure silver in the standard silver dollar at 371¼ grains, (or 24.056 grams,) a reduction of 4 per cent. from the standard established by proclamation in 1704, and of 1¼ per cent. from the dollar prescribed in 1786 by the Congress of the Confederation.

This dollar (unlike the preceding) is not based on the Spanish-Mexican dollar of 1704, but on the Spanish-Mexican dollar of 1772, from which it was derived by weighing of a large number of such coins as found in actual circulation, and consequently considerably reduced by abrasion, nearly 1.6 per cent., below the standard at which they were issued from the Mexican mint.

The weight of pure silver in the dollar has continued unchanged from that time to the present, although the standard weight of the coin itself, reduced by a withdrawal of 3½ grains of alloy, has been somewhat diminished.

It appears, therefore, that the existing silver dollar, although professedly based on the Spanish or Mexican silver dollar, does not fairly represent any coin ever issued from those mints; that it is merely a representative of the average of abraded Spanish-Mexican coins.

The coins most in demand for oriental commerce were for many years the pillared Spanish-Mexican piasters; and such was their popularity that they continued to be preferred long after their intrinsic value had been considerably reduced by wear in use. The restoration, as a trade-coin, of a silver dollar, approximating to the old standard, to wit: one containing 25 grams of *pure* silver, is a subject which would seem to demand favorable consideration.

It may be well here to call attention to the fact that the French silver coin of five francs contains, of *standard* gold, $\frac{9}{10}$ fine, just 25 grams, which also is the weight proposed for two half-dollars of the token or subsidiary coinage of the United States, in case that a metric coinage is adopted. (See Table III, pp. 30 and 31, Appendix to Report on the Mint and Coinage Bill.) The intrinsic value of the proposed *subsidiary* coinage would therefore be less by just one-tenth than that of the *commercial* silver coin here proposed.

Yours respectfully,

E. B. ELLIOTT.

JOHN JAY KNOX, Esq.,
Deputy Comptroller of Currency,
United States Treasury Department.

[Inclosure No. 1.]

WAR DEPARTMENT, SURGEON GENERAL'S OFFICE,
Washington, D. C., June 24, 1870.

DEAR SIR: I have received a note from you asking for my views of the practicability of establishing certain limits of tolerance for the deviation of gold coins from their standard weight, the proposition being, as I understand, to reduce the limits heretofore allowed in the United States mints, and to require closer weighing in the future.

I cannot speak as to the ease or difficulty of *making* coins of an exact weight, or

of testing them by *machine* weighing, but only on the particular subject of testing by *hand* weighing.

A good assay balance will weigh a single coin to within $\frac{1}{10}$ of a milligram, or $\frac{1}{650}$ of a grain, but this is an accuracy which involves trouble in the attainment, and to come within a milligram is near enough for most purposes, and is as near as is commonly attained in chemical weighings.

When two weights, not exceeding two or three ounces each, and not differing from each other by more than ten or twelve milligrams, are counterpoised against each other on a proper form of balance, their difference may be estimated to within one, or at most to within two milligrams, according to the amount of difference, by observing the deflection of the pointer, without the necessity of adding weights to either side.

To come to the practical point, I am of the opinion that with a balance specially adapted to the purpose, the weight of a coin could be determined to within a milligram about as quickly as to within any other limits, the work being done under suitable arrangements. In weighing rapidly, however, errors as great as two milligrams would occasionally occur, and coins which seem to approach the limits on either side by nearer than two milligrams would require a more deliberate weighing; and the limits allowed should be such that the greater part of the coins made should be two milligrams within the extreme on either side.

With regard to the weighing of amounts of gold coin of $1,000 and upward, it may be remarked that it is possible to weigh them to within their one-millionth part, but that such accuracy cannot be relied on, as two good weighings of the same body will very often differ by more than one-millionth, and an approximation to the exact weight closer than the hundred-thousandth part ought not to be expected in anything but scientific work. Errors of one fifty-thousandth, or twenty parts in a million, ought, I think, to be tolerated, but beyond that limit, any desired amount of accuracy may reasonably be demanded.

The opinions which I have expressed are founded upon experience with Becker's balances, which are the ones most used in this country for the weighing of bullion, and are, perhaps, the most convenient and manageable balances made.

There is a balance made by the Coast Survey Office on an old-fashioned plan, which is often seen in government establishments. This is only suited to the particular purpose of adjusting weights, and when used for ordinary purposes it requires trouble to attain with it an approximation to accuracy.

Yours truly,

B. FANEUIL CRAIG.

E. B. ELLIOTT, Esq.,
Treasury Department.

[Inclosure No. 3.]

TOLERANCE OR REMEDY OF THE MINT IN GREAT BRITAIN, BOTH AS TO WEIGHT AND FINENESS.

	In a pound troy prior to the act of April 4, 1870.		In each coin under the act of April 4, 1870.
Gold:	*Grams.*	*Thousandths.*	*Thousandths.*
Fineness	15	$2\frac{3}{8}$	2
Weight	12	$2\frac{1}{12}$	$1\frac{5}{8}$ (or 1.6224)
Silver:			
Fineness	24	$4\frac{1}{4}$	4
Weight	24	$4\frac{1}{8}$	$4\frac{1}{8}$

Under the act of April 4, 1870, "it shall be lawful for her Majesty, with the advice of her privy council, from time to time, by proclamation, to diminish the amount of remedy allowed by the first schedule to this act in the case of any coin."

The limit of wear, or the least current weight of gold coins, is 6.0412 per 1,000.

Legal tender: Gold coin, when not below the least current weight, is a legal tender to any amount; silver coins, in sums not to exceed 40 shillings, (about $10;) bronze (or copper) coins, new law, in sums not to exceed 1 shilling.

[Inclosure No. 2.]

Table comparing the "Tolerance," (or "Remedy,") existing and proposed, of the Mint of the United States in the weight of its gold and silver coins with that of certain countries of Europe; and also with computed values approximately proportioned to the square root of the weights of the coins.

In the columns of computed or theoretical values the tolerance assigned to the silver coins is proportionately two and a half times as large as that assigned to the gold coins.

Metal.	Denominations of coins, (approximate equivalents.)			Tolerance or deviation from the standard allowed to the coiners in the weight of single pieces.												Tolerance in the weight of large numbers.		
				Expressed in milligrams.						Expressed in thousandths.						Proportion per 100,000.		
				United States.			France, Belgium, Italy, Switzerland, &c.	Great Britain, (law of April 4, 1870.)	Theoretical.[1]	United States.			France, Belgium, Italy, Switzerland, &c.	Great Britain, (law of April 4, 1870.)	Theoretical.[1]	United States.		
	United States.	France, Belgium, Italy, Switzerland, &c.	Great Britain.	Existing law.	Proposed in the bill.	Metric proposition.			$\frac{10}{\sqrt{\frac{1}{3}W}}$	Existing law.	Proposed in the bill.	Metric proposition.			$\frac{10}{\sqrt{3W}}$	Existing law.	Proposed in the bill.	Metric proposition.
Gold			5 pounds					64.8	37.3					1⅛	0.89			
	Double eagle	100 francs		32.4	32.4	33⅓	32.3		33.3⅓	0.97	0.97	1.00	1		1.00	14.0	3.72	4
	Eagle	50 francs	2 pounds	32.4	24.3	25.0	16.1	25.9	23.6	1.94	1.45	1.50	1	1⅝	1.41	18.6	3.72	4
	Half eagle		Sovereign	32.4	16.2	15.0		13.0	16.7	3.88	1.93	1.80		1⅛	2.00	27.9	3.72	4
		20 francs					12.9		14.9				2		2.24			
	3 dollars			16.2	10.8	12.0			12.9	3.23	2.15	2.40			2.58	31.0	4.65	5
	Quarter eagle		Half sovereign	16.2	10.8	10.0		6.5	11.8	3.88	2.58	2.40		1⅛	2.83	27.2	3.72	4
		10 francs					6.5		10.5				2		3.16			
	Dollar	5 francs		16.2	5.4	5.0	4.8		7.5	9.69	3.23	3.00	3		4.46	46.5	9.30	10
									$\frac{25}{\sqrt{\frac{1}{3}W}}$						$\frac{25}{\sqrt{3W}}$			
Silver			Crown					117.8	79					4⅛	2.6			
	Dollar	5 francs		97.2			75.0		72½	3.64			3		2.9	23$\frac{3}{11}$		
			Half crown					58.9	56					4⅛	3.7			
	Half dollar		Florin	97.2	64.8	62.5		47.1	51	7.81	5.21	5.00		4⅛	4.1	37½	2½	2½
		2 francs					50.0		45½				5		4.6			
	Quarter dollar		Shilling	64.8	64.8	62.5		23.6	36	10.42	10.42	10.00		4⅛	5.8	50	2½	2½
		1 franc					25.0		32½				5		6.5			
			Sixpence					11.8	25⅝					4⅛	8.2			
	Dime	½ franc		32.4	32.4	50.0	17½		22⅝	13.02	13.02	20.00	7		9.2	62½	12½	10
			Fourpence					7.8	20½					4⅛	10.2			
			Threepence					5.9	17⅓					4⅛	11.8			
	Half dime			32.4					16½	26.04					12.9	125		
		⅕ franc	Twopence				10.0	3.9	14½				10	4⅛	14.5			
			Penny					2.0	10⅓					4⅛	20.0			

[1] The theoretical values in this table are computed on the approximately correct assumption that the United States double eagle, *four* pounds sterling, and *one hundred* gold francs are equivalent to each other; and to 30 grams of pure gold, or 33⅓ grams of standard gold, nine-tenths fine. The symbol W denotes the Weight of the coin, in grams.

Dr. M. F. Bonzano, late melter and refiner at branch mint, New Orleans, to Mr. Knox.

NEW ORLEANS, *June 1, 1870.*

MY DEAR SIR: I had the pleasure of receiving, under your frank, your report in relation to a revision of the laws pertaining to the Mint and coinage of the United States.

METRICAL SYSTEM OF WEIGHTS APPROVED.

I am much pleased to perceive that you propose to introduce the French system of weights into the new bill, a step in advance which cannot fail to meet the approbation of those charged with the responsible duties of conducting the operations of the Mint, and of the public at large. (See page 11 of report Senate Mis. Doc. No. 132, 41st Congress, second session.)

MINT BUREAU.

The establishment of a Mint Bureau has become an undeniable necessity since the operations of the Mint cover so large a field. The old system, has, in truth, worked well enough with only one or two branch mints of insignificant business, but with the constant increase of production of precious metals, a corresponding increase of the importance and business of the Mint and its branches, and the inevitable distribution of these branches to the very extreme limits of the country, the necessity of having the general business of the Mint and coinage under an officer near the other bureaus of the treasury, and in constant communication with the Secretary, should, I think, be readily appreciated by those familiar with the transactions of the Mint.

PROVISIONS AS TO WASTAGE AND TOLERANCE APPROVED.

The provisions of the bill in relation to wastage, tolerance, &c., are based upon the practice of the best minting establishments of the civilized world and our own experience. They are fair and just, and competent mint officers will find no difficulty in complying with them.

THE BILL GENERALLY APPROVED.

Viewing the bill as a whole, I am of opinion that it will be found a great improvement on the old laws, and will stand for a long series of years before the necessity for any change will arise.

The thanks of every one capable of appreciating the importance of the subject of your report will certainly be your reward for the minute, thorough, and exhaustive examination you have given to this important matter, and the direct and fair manner in which you have dealt with the deficiencies of the old laws, which experience had shown were no longer adequate to maintain the mint establishment of the United States at the same high standard of excellence as in some other countries, and of sufficiently protecting the interests of the government.

Very truly, yours,

M. F. BONZANO.

JOHN JAY KNOX, Esq.,
Deputy Comptroller of the Currency, Washington, D. C.

Superintendent of United States assay office at New York to Mr. Knox.

UNITED STATES ASSAY OFFICE,
New York, June 3, 1870.

SIR: Your letter, asking me to examine and comment upon the bill for the reorganization of the Mint, &c., which you kindly forwarded to me, and to procure also the opinions of the officers of this institution upon it, has been received.

In accordance with your request I have referred the bill to Dr. Torrey, assayer, and Mr. Mason, melter and refiner, who are now making the desired examination, and hope to be able to report their views by the first of next week. They deem it necessary to take this amount of time in order to give to the bill the careful consideration its importance seems to demand.

My own connection with the assay office has been so short that, with every disposition to aid with advice or suggestions, I do not feel at liberty to venture an opinion either for or against any of the proposed changes. That I must leave to those more familiar with the working of the present system.

Very respectfully, yours,

THOMAS H. ACTON,
Superintendent.

JOHN JAY KNOX, Esq.,
Deputy Comptroller of the Currency, Washington, D. C.

Assayer of United States assay office at New York to Mr. Knox.

UNITED STATES ASSAY OFFICE,
New York, June 10, 1870.

DEAR SIR: I have made a careful examination of the "Bill revising the law relating to the Mint, assay offices, and coinage of the United States," and, except in one or two particulars, have no objection to its provisions.

It is proposed to discontinue the office of treasurer, which I have always thought was necessary as a check on the superintendent. There has been such an office in the Mint and at San Francisco from the time that these institutions were organized, and a treasurer is equally necessary in the assay office.

Perhaps it would be well to provide more specifically for the assistants of the operative officers than is now done.

I think, also, that a provision in section 20 of your bill should be altered, to read, (last line,) "and the value shall be stamped on the same." As a whole, the bill seems to include every important provision contained in the existing laws upon these subjects, and, although I might prefer to have a few other sections modified, I give my full consent.

Yours, truly, JOHN TORREY, *Assayer.*

JOHN JAY KNOX, Esq.,
Deputy Comptroller of the Currency, Treasury Department.

Superintendent of United States assay office at New York to Mr. Knox.

UNITED STATES ASSAY OFFICE,
New York, June 21, 1870.

SIR: I send inclosed a communication from Mr. Andrew Mason, our melter and refiner, in regard, to the proposed Mint law. Without expressing an opinion either way, for the reasons given in my former note, I hope you may find its suggestions valuable in perfecting the details of the new bill.

Very respectfully, yours, THOMAS C. ACTON,
Superintendent.

JOHN J. KNOX, Esq.,
Deputy Comptroller, Washington, D. C.

Melter and refiner of United States assay office at New York to Mr. Acton.

UNITED STATES ASSAY OFFICE,
New York, June 18, 1870.

DEAR SIR: Having expressed my views on the subject to the department, in a communication dated January 27, through Hon. Charles J. Folger, treasurer, &c., allow me simply to comment on such points as impress me in the proposed bill "revising the laws relating to the mints," &c., in response to the request of John Jay Knox, esq., Deputy Comptroller.

Section 1. If the policy hitherto suggested, of concentrating the existing minting establishments into a lesser number, should be adopted, it would seriously modify the argument for a special Mint Bureau in Washington. The supervision by the auditing officers should undoubtedly be careful and rigid in any event.

Section 3. Whether the proposed union of the office of superintendent and treasurer in one would work better than the existing one between the treasurer and United States assistant treasurer, is doubtful. While want of proper scrutiny and watchfulness by officers under the present system may lead to evil results, the same causes will produce the same effects under the proposed alteration. The difficulty in examining the melter and refiner's account would be the same in either case.

The provision contained in section 4, that all employed in the different departments shall be recommended and nominated in writing by the respective officers is but a proper extension of the principle already enacted by law for one of them (treasurer's.) The approval of bills belonging to each department by the officer thereof should be required before payment.

Section 6. The word "standard" should be omitted before "bars or disks."

Section 13. In present practice the proportion of silver in the alloy of gold coin rarely reaches one-tenth, but as it is not profitable to refine gold of a very high fineness, (over .975,) and such might be largely deposited, the wisdom of limiting the proportion absolutely to one-tenth is questionable.

Section 15. The retention of the silver dollar, as at present issued, affords a standard of valuation for silver, and the demand for it at the regular coinage charge indicates its usefulness otherwise.

Section 17. The present bronze cent is thought by many to be preferable to a copper-nickel one, and it seems useless to change it at a heavy expense.

Section 20. Depositors prefer to have the *value* stamped on their bars—both gold and silver.

Sections 21, 27, 28, and 29. The first is inconsistent with the second, in stating that any owner of "gold and silver bullion may deposit," &c., "to be formed into *coin* or bars for his benefit;" and generally, there would be practical difficulties in the *two* modes of paying for silver. The present method is uniform, and the limit at which small silver coin is a legal tender is a natural and sufficient check to redundancy.

Section 24. The words "bars or coin" should be substituted for "standard metal fit for coinage."

Section 25. The charge for copper alloy is covered by the present coinage charge. While depositors are subject to a charge for making fine bars, &c., there can be no valid reason for furnishing coin (a much more expensive work) without one. A reasonable charge will regulate the supply to the people generally, while the owners of bullion will be accommodated by the government honoring its own stamp on bars, by receiving them on deposit at their coin valuation, on an equal footing with coin.

Section 44. While, under ordinary circumstances, the reduced margin for wastage in the melter and refiner's account would be amply sufficient, it is questionable whether a faithful officer should be personally subject to the increased risk.

Section 47. The propriety of *coining* by contract may just as well be considered as of *refining* by contract, which is proposed substantially. If it is unadvisable for the government to refine bullion, the simple arrangement would be to decline receiving unrefined bullion on deposit.

There should be some provision for assaying samples of gold and silver not intended for deposit, at a proper charge.

The experience of the officers of the Mint will enable them to give a general review of the bill; but I shall be glad if the foregoing suggestions can be of any service in the full consideration of this important subject.

Very respectfully,

ANDREW MASON,
Melter and Refiner.

THOMAS C. ACTON, Esq.,
Superintendent, &c.

Superintendent of branch mint at San Francisco to Mr. Knox.

OFFICE OF SUPERINTENDENT UNITED STATES BRANCH MINT,
San Francisco, California, June 5, 1870.

SIR: In reply to yours of 20th ultimo, I have to say that your letter, together with the accompanying proposed bill revising laws relative to mints, assay offices, and coinage, was submitted to the operative officers of this branch, and it was agreed that each should address you a note under his own hand giving his views in relation to the proposed reforms.

METHOD OF EMPLOYING WORKMEN.

For myself I can only say with great deference that I still entertain serious apprehensions in regard to the proposed change in the method of employing workmen, and fear that under some circumstances it might result in collisions between departments, and under others in collusions between operative officers and employés to the injury of government. I should hesitate to recommend that the superintendent be called upon to perform the duties of treasurer without some check in the way of counts and examinations, which I do not observe that the bill provides.

BILL GENERALLY APPROVED.

In all other respects I am greatly pleased with the bill, and believe that its passage would greatly conduce to *correctness, efficiency,* and *economy* in the mint service. Owing to the peculiar nature of the subject it is my opinion that it would be difficult, if not impossible, to present a less objectionable bill to Congress, and I think that the confusion of the present mint laws, as well as the patent necessity of the proposed reforms, should secure the early passage of the bill.

O. H. LA GRANGE, *Superintendent.*

Hon. J. J. KNOX,
Deputy Comptroller, Washington, D. C.

Assayer of branch mint at San Francisco to Mr. Knox.

ASSAY OFFICE, UNITED STATES BRANCH MINT,
San Francisco, June 3, 1870.

SIR: I have received a copy of your report and "Bill revising the laws relating to the mints, assay offices, and coinage of the United States," and Superintendent La Grange has informed me that you have requested the opinions of the officers of this mint upon it.

I have read it over carefully, and the only suggestion I have to propose now is, to section 47. I think it should be changed so as to read as follows: "That unparted bars may be exchanged at any of the respective coinage mints for *refined bars not less than .990 fine*, on such terms and conditions," &c.

Section 13 provides that silver shall not exceed one-tenth of the whole alloy; consequently, if crude bullion should be exchanged for "fine bars" the fineness of which was below .990 fine, it would have to be refined at the Mint to comply with section 13; then economy, the object to be obtained in section 47, would be defeated.

Don't change section 13; it is good.

With great respect, your obedient servant,

O. D. MUNSON, *Assayer.*

Hon. JOHN J. KNOX,
Deputy Comptroller of the Currency, Washington, D. C.

Mr. French to Mr. Knox.

ABRASION OF COIN.

FOOTE & FRENCH, BANKERS,
7 Congress st., and 2 Congress Square, Boston, June 3, 1870.

SIR: I have read with interest your report of April 25, upon revision, &c., of Mint and coinage.

I notice in the English act given in Appendix D, section 4, that a tender of coin must be in pieces not * * * diminished in "weight by wear or otherwise, so as to be of less weight than the *least current weight*" given in schedule first annexed to the act.

I believe there is no similar provision in our existing statutes. Will you inform me what rule or usage, if any, obtains in the department by which light coins can be rejected?

Upon inquiry of the assistant treasurer at New York, I learn that in absence of suspicion, *all* coins are received and paid out. As a usage at the custom-house in this city, I believe, the weight of five thousand dollars in double-eagles is examined and required to come up to a certain standard before being accepted, although some may be right by tale.

Respectfully,

F. O. FRENCH.

JOHN JAY KNOX, Esq.,
Comptroller of Currency, Washington, D. C.

Mr. Knox to Mr. French.

TREASURY DEPARTMENT,
OFFICE OF COMPTROLLER OF THE CURRENCY,
June 5, 1870.

DEAR SIR: I have received your note of the 3d instant, in which, referring to my report[1] and to section 4 of the English coinage act, 1870, given in the appendix, you request me to inform you what rule or usage obtains in this department by which light coins may be rejected.

Section 4 of the English coinage act, 1870, to which you refer, provides that "a tender of payment of money, if made in coins which have been issued by the mint in accordance with the provisions of this act, and have not been called in by any proclamation made in pursuance of this act, and have not become diminished in weight by wear or otherwise, so as to be of less weight than the current weight, that is to say, than the weight (if any) specified as the least current weight in the first

[1] For report and "English coinage act 1870," see Senate Mis. Doc. No. 132, 41st Congress, 2d Session.

schedule to this act, or less than such weight as may be declared by any proclamation made in pursuance of this act, shall be a legal tender—in the case of gold coins for a payment of any amount; in the case of silver coins for a payment of an amount not exceeding forty shillings, but for no greater amount; in the case of bronze coins for a payment of an amount not exceeding one shilling, but for no greater amount. Nothing in this act shall prevent any paper currency which, under any act or otherwise, is a legal tender, from being a legal tender."

The schedule to which reference is made in this section limits the abrasion in the sovereign to 0.774 grains, or about three (2.998) cents of our gold standard, which is equivalent in the sovereign and half-sovereign also to about five-eighths (0.625) of one per cent.

The French mint laws limit the abrasion within which their gold coins may be received as a legal tender to seven-tenths of one per cent. The twenty-franc piece is worth $3.859 in our currency, and the limit of wear allowed on this piece is, therefore, two and seven-tenths (2.702) cents of our gold standard.

Russia, Spain, and the states constituting the German Coin Union, also have laws relative to allowance for abrasion.

This subject was not entirely overlooked. In the bill (a copy of which I send herewith) first printed and transmitted for examination to experts in various parts of the country, it was provided, in section 25, that our gold coins may be recoined at the expense of the United States whenever the loss by abrasion shall have reduced them one grain below the deviation allowed by law. The section was introduced into that bill for the purpose of obtaining an expression of opinion upon that subject, and was subsequently omitted from the bill transmitted to the Senate by the Secretary. The English section is much better in form, and it was my intention to have referred to it in the report. I am obliged to you for calling my attention to the subject at this time.

There is no law and no regulation of the department with reference to the limit of wear of coins. You refer to a *usage* of this kind in the Boston custom-house. Will you please ascertain and inform me what that *usage* is?

I shall be glad to receive any further suggestions that may occur to you in reference to the bill.

I am, very truly, yours,

JNO. JAY KNOX,
Deputy Comptroller.

F. O. FRENCH, Esq.,
Of Messrs. Foote & French, Bankers, Boston, Mass.

Mr. French to Mr. Knox.

FOOTE & FRENCH, BANKERS,
7 Congress st., and 2 Congress Square, Boston, June 11, 1870.

SIR: I am in receipt of your esteemed favor of 5th instant, at hand this morning.

The usage at the custom-house, I believe, is to receive coin by tale, but parcels of $5,000 in eagles and double-eagles, or of $1,000 in smaller coin, which fall below the customary deficiency from standard weight, are submitted to a careful examination of individual pieces, and such as do not pass the test of Allender's gold-coin scale, (patent of November 27, 1855,) and which is approximative, are rejected.

At the sub-treasury single pieces are not rejected unless imperfect (punched, soldered for jewelry, &c.) or subjected to vicious process. The deviation from below standard there expected in parcels of coin is *not beyond*

Five pennyweights, in $5,000, double-eagles.
Fifteen pennyweights, in $5,000, eagles.
Five pennyweights, in $1,000, one-half eagles.
Five pennyweights, in $1,000, one-quarter eagles.
Five pennyweights, in $999, three dollar pieces.
Five pennyweights, in $1,000, one dollar pieces.

But the authority for this expected deviation, other than tradition, was not stated. In practice, I am further informed that the parcels of $5,000 in eagles are frequently deficient as much as 18 pennyweights, those of $1,000 in quarter-eagles 6 to 7 pennyweights, while parcels of double-eagles, half-eagles, three and one dollar pieces come within the limit with great constancy.

The increased deficiency in the coins mentioned indicate the necessity of some redemption of light coins, to prevent even greater deviations.

Respectfully,

F. O. FRENCH.

JOHN JAY KNOX, Esq.,
Deputy Comptroller Currency, Washington.

The Secretary of the Treasury to the assistant treasurer at New York.

ABRASION OF COIN.

TREASURY DEPARTMENT,
Washington, D. C., June 18, 1870.

SIR: I inclose herewith a copy of a letter received from Messrs. Foote & French bankers, Boston, in reference to a usage in the custom-house of that city of receiving gold coins at less than standard weight.

I will thank you to inform me if any similar usage obtains in your office; and, also, if you have any data which you can give me in reference to the deviation hitherto found from standard, in weighing in bulk gold coins of different denominations.

If it is practicable send me, at your earliest convenience, a statement similar to that furnished by French & Foote, in reference to the experience of your office in this particular.

Very respectfully,

GEO. S. BOUTWELL,
Secretary of the Treasury.

Hon. CHARLES J. FOLGER,
Assistant Treasurer, New York.

Assistant Treasurer New York to the Secretary of the Treasury.

ABRASION OF COIN.

UNITED STATES TREASURY,
New York, June 20, 1870.

SIR: I have the honor of acknowledging the receipt of your letter, dated 18th June, 1870, covering copy of letter of Messrs. Foote & French, bankers; both relating to the diminution of value in coin from abrasion.

The usage of the custom-house at Boston, as set forth in the letter of Messrs. Foote & French, does not prevail at this office. It has, as I learn, ever been the custom of this office, it is now its custom, to receive all United States coin by count alone; in no case rejecting any, however light, if the diminution is the result of natural wear and use alone in circulating as a medium. Standard weights have never been used to confirm amounts.

This forenoon a test was applied to certain quantities of coin taken haphazard from that coming to the office in the ordinary flow of daily business, with the following result:

$5,000, gold dollars, twenty-five pennyweights short.
$5,000, quarter-eagles, twenty-five pennyweights short.
$5,000, half-eagles, twenty-three to twenty-seven pennyweights short.
$5,000, eagles, eighteen to twenty-one pennyweights short.
$5,000, double eagles, ten to twelve pennyweights short.

It has always been perceptible to the persons in the coin-room of this office that the coin of the country was much decreased in weight by the attrition of circulation; but no piece has ever been rejected when the loss has resulted from honest handling.

I can give no further statement than this as to the experience of this office in this particular, for the reason that the attention of clerks has never been especially directed to this point, they taking by count entirely. The desire of the business community for the larger coins, when coin is taken from us for foreign shipment, is based upon this well-known fact, that coin does suffer in the handling, and that the smaller in value the coin, the greater the proportionate diminution.

With respect, I am, your obedient servant,

CHAS. J. FOLGER,
Assistant Treasurer United States.

Third Assistant Postmaster General to Secretary of the Treasury.

REDEMPTION OF THE BRONZE AND NICKEL COINAGE NECESSARY.

POST OFFICE DEPARTMENT,
OFFICE OF THE THIRD ASSISTANT POSTMASTER GENERAL,
Washington, D. C., November 2, 1869.

SIR: I have the honor to call your attention to the inclosed copy of a letter received at this department from the postmaster at Nashville, Tennessee, under date of 29th ultimo, in relation to the disposition of copper and nickel coins received for postage.

You will observe that, while the postmaster is compelled to receive the coins in limited quantities, he states he is unable to pay them out, as they are not used or regarded as currency in that section of the country.

Similar statements and complaints have been made recently by other postmasters, and it is believed a large amount of the revenues of this department is locked up and withheld from use from the cause mentioned by the postmaster at Nashville.

It would seem that some measure of relief, in such cases, ought to be adopted, and I beg to ask that the subject receive your early and favorable attention.

Very respectfully, your obedient servant,

W. H. H. TERRELL,
Third Assistant Postmaster General.

Hon. GEORGE S. BOUTWELL,
Secretary of the Treasury.

Postmaster at Nashville, Tennessee, to Postmaster General.

POST OFFICE, *Nashville, Tennessee, October 29, 1869.*

SIR: I inclose the following item, taken from the Associated Press dispatches published this morning:

"Secretary Boutwell will shortly issue a circular authorizing the assistant treasurers and designated depositories to redeem the nickel five-cent pieces in sums of $100, or more."

Why cannot the one and two cent coppers be treated in the same way?

This office is greatly annoyed by the great pressure to exchange them for postage stamps. It seems very inconsistent for any department of the government to refuse to take any of their own recognized issue of currency.

We take these coppers, according to legal tender law, in limited quantities; but there is no possible way to get rid of them here.

In this community and section of country coppers are not used or regarded as currency, and they ought to be redeemed and retired.

Very respectfully,

ENOS HOPKINS, *Postmaster.*

Hon. W. H. H. TERRELL,
Third Assistant Postmaster General, Washington, D. C.

Postmaster at Cape Vincent, New York, to Secretary of the Treasury.

REDEMPTION OF THE BRONZE AND NICKEL COINAGE.

CAPE VINCENT, N. Y., *June 14, 1870.*

SIR: Will you have the kindness to inform me on what terms and conditions your department will redeem the bronze and nickel cents now in circulation?

In my business here as postmaster they have accumulated on my hands since two or three years. I cannot exchange them with individuals. Too many cents are in circulation already. I am obliged to take them from others in selling postage stamps, but they will not take them from me.

What am I to do, unless the department will redeem them? I am willing to pay the express charges.

Very respectfully, your obedient servant,

JNO. H. MOORE.

Hon. GEO. S. BOUTWELL,
Secretary of the Treasury.

P. S.—I have also too many bronze two-cent pieces and five cent nickels. Will you redeem them also?

Messrs. Holley & Shelden to the Secretary of the Treasury.

REDEMPTION OF THE BRONZE AND NICKEL COINAGE.

HUDSON, N. Y., *June 11, 1870.*

DEAR SIR: Is there no way by which we can dispose of pennies? The country is flooded with all kinds, large and small, making it very unpleasant to do business. We are obliged to handle hundreds of dollars weekly in pennies, and we find great

difficulty in getting rid of them again. In this section of the country, mechanics are compelled to take two or more dollars weekly in payment for their services, and have to go begging around to the stores to dispose of them as the merchants are all overrun with them.

NOT RECEIVED BY OFFICERS OF THE GOVERNMENT FOR TAXES AND POSTAGE STAMPS.

We pay several hundred to the government yearly in licenses, special taxes, and income tax for doing business, still the government officers will not take a dollar of their own pennies in payment for said taxes. We cannot even buy postage stamps with them; the postmaster refuses to sell over one stamp and receive pennies in payment.

THEY SHOULD BE REDEEMED.

In common justice to the business community, who are the supporters of the government, should not pennies and three or five cent pieces be redeemed when presented at the Mint or Treasurer or Assistant Treasurer's Office? This would cost about one and a half to two per cent. in express charges, but would relieve business men of a large amount of dead capital lying idle through the country. Think of each member of Congress and all government officers receiving one-fourth part of their salaries in pennies and then you can get an idea of the unpleasant manner in which we and hundreds of others are compelled to do business. We labored under the same difficulty for a long time with fractional currency previous to the redemption of the same.

Hoping you will give this matter your careful attention, we are, respectfully yours,

HOLLEY & SHELDEN,
Hudson, New York.

Hon. G. S. BOUTWELL,
Secretary of the Treasury.

Secretary of the Treasury to Messrs. Holley and Shelden.[1]

REDEMPTION OF MINOR COINAGE.

TREASURY DEPARTMENT, *June 17, 1870.*

GENTLEMEN: I have received your letter of the 11th instant, inquiring upon what terms and conditions the department will redeem the bronze and nickel coinage now in circulation.

The nickel cent coins, issued under act of February 21, 1857, and composed of eighty-eight per cent. copper and twelve per cent. nickel, are not a legal tender for any amount, but are exchangeable at the Mint of the United States for three and five cent nickel pieces upon the terms stated in the inclosed circular.

The one and two cent pieces, authorized by act of April 22, 1864, composed of ninety-five per cent. copper and five per cent of tin and zinc, and which comprise the chief portion of the cent coinage in circulation, are a legal tender for any payment not exceeding four cents in amount.

The three-cent nickel pieces are a legal tender for sixty cents, and the five-cent pieces for one dollar.

There is no provision of law authorizing the redemption of the one and two cent pieces, but a circular has recently been issued by the Secretary directing the redemption of the five-cent pieces by the Treasurer and assistant treasurers, as authorized by act of May 16, 1866, when presented in sums of not less than one hundred dollars.

I inclose herewith copy of a bill which has been introduced into the Senate, during the present session, relative to the revision of our mint and coinage laws, and it is probable that some legislation will transpire not long hence which will correct the inconvenience of which you justly complain.

Very respectfully,

J. F. HARTLEY,
Acting Secretary of the Treasury.

Messrs. HOLLEY & SHELDEN,
Hudson, New York.

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[1] Similar letters were written in reply to the Postmaster General and to the postmaster at Cape Vincent.

LETTER OF MR. ERNEST SEYD ON COINAGE, TO THE HON. SAMUEL HOOPER, CHAIRMAN COINAGE, WEIGHTS AND MEASURES COMMITTEE, HOUSE OF REPRESENTATIVES.

[Senate Mis. Doc. No. 29, Fifty-third Congress, first session.]

Mr. Hoar presented the following letter from Ernest Seyd to Samuel Hooper on the subject of coinage.

I have the bill before me, and Mr. Latham kindly sent me a copy of your remarks respecting my book and inviting my suggestions.

I cheerfully respond to this invitation and beg to submit to you the following remarks. (I shall pass over those sections in reference to which I have no remarks to make, and point to others requiring notice.)

LA PRINCES STREET BANK,
London, February 17, 1872.

TO SAMUEL HOOPER, Esq., M. C.:

DEAR SIR: You were kind enough to forward to Mr. Alfred Latham a copy of your coinage bill for the United States, to be sent to me, and you expressed a wish to receive criticisms on its provisions.

SEC. 14. The issue of a variety of gold coins, such as the $20, $10, $5, $3, $2½, and $1 pieces, is injudicious. True, the $20 piece is a magnificent coin, but for ordinary purposes in obtaining change it is less useful than four $5 pieces, for large transactions connected with international trade the $20 pieces are the most convenient coins for melting down, and that is the fate of the majority of them. The $1 gold piece, on the other hand, is much too small. Its wear is excessive, and it soon becomes totally unfit for a standard of value. The French 5-franc gold piece has already been condemned for this very reason.

A variety of coins must also be objected to for another reason, viz: That connected with the handling of the pieces it prevents the use of the "weighing scales." On pages 164, 165, of my book, "Suggestions in reference to the metallic currency of the United States," I speak of this matter at length, and I think the remarks therein made are worthy of attention.

I can quite understand that Americans, accustomed to see their splendid $20 piece and the $1 piece, do not fully appreciate the weight of these objections; but it must be borne in mind that the American public have only had a short period, say from 1849 to 1861, in which they had anything like dealing in gold money, since which time, through the war, they have been so much habituated to paper money, whereas we in England, accustomed to vigorous dealings in gold, have learned experience, and are better able to appreciate these distinctions and their importance from practical and economical points of view. And from these points of view the question of a variety of gold coins is not an English or an American one, but one of cosmopolitan importance also, for there are principles involved in it.

In England we only issue sovereigns and half sovereigns; but we complain, and with just reason, of the latter piece (see X's letter in English, page 40, of German pamphlet which I send herewith, wherein the issue of the one-half sovereign is fittingly called a legislative error). The German new coinage will consist principally of the 20-mark piece and only a limited number of 10-mark pieces will be issued. The French have coined 100-franc and 40-franc pieces only as "show pieces" and the 5-franc gold pieces will be given up.

I think that America ought to coin only $10 and $5, or $5 and $2½ pieces, certainly not more than $10, $5, and $2½, and that the $20, $3, and $1 pieces ought not to be coined, excepting as show pieces, in limited quantities. The suggestion that $20 pieces can be coined cheaper has no foundation worth mentioning.

The question of a variety of coins has also a most important bearing on the abrasion of the pieces and their consequent lightness. In the bill I find nothing whatever making provision for this; and I may perhaps be pardoned for charging this omission to the account of the general want of thorough experience made in America in reference to gold coin.

Where are the provisions for limiting the current weight of gold coins? May they be abrased or light to any extent and still continue legal tender? And, if not, who is to bear the cost of their reinstatement?

In England the individual holder must bear the loss; if the sovereign is under weight by three-quarters of a grain it is cut up and the owner loses the difference. In France the State has hitherto withdrawn light gold, but sparingly; on the rest the coinage is young, and the question will now be postponed because of the paper issue.

In Germany the new coinage bill provides for the reinstatement of worn coins by the State; but the question is open; for, as the State has conquered the gold and issues it at its own option, it can afford such a liability. It is, however, acknowl-

edged that the business "of making coins light" and obtaining new ones for them may become extensive.

The English system in regard to light coins is the only true one. Attempts were made by Mr. Lowe to levy 1 per cent mintage, so as to provide a fund from which the recoinage loss on old pieces by the State might be recouped. The proposal, however, as it deserved, fell through as absurd. The controversy on that score has been published by the Bank of England. The letters in English (printed in the German pamphlet) again refer to the matter.

The allowance for light coin made here is 3¼ grains, i. e., the mint weight of the sovereign being 123.274 grains, it ceases to be legal currency when below 122½ grains. The public offices, and the Bank of England's issue department, weigh out light pieces and cut them by a machine. The owner can receive the pieces, so cut, back again or sell them to the bank as standard bullion, at 77.9 per ounce. Some people complain of this, but all who have fully studied the subject agree that it is the only true way of settlement, and that the coinage can thus be kept in fair order.

The $20 piece ought not to be allowed to lose more than 2 grains, the $10 1¼ grains, the $5 ¾ grain, the $3 and $2½ ½ grain, the $1 ¼ grain, and you will now at once perceive how very necessary it is that the variety of the pieces should be as restricted as possible, so as to save trouble to the public departments and the Treasury.

I do not know how you intend to treat this matter, and whether this plan of keeping the gold coinage in order may not excite much opposition.

The favorite idea of those opposed to this system is, that the State itself should pay for light coins, either by a direct appropriation from the revenue, or by applying the "profits" of the Mint on the token coinage for this purpose. In this country it has been shown that the State has no such obligation; that by so doing it would only encourage the sweating of the coin, and as for the profit on the minor coinage, you will find that it can not be brought into accord with the wear and tear of the gold coin.

We look upon all these suggestions as "hocus pocus." I think, therefore, that your public departments ought to check the gold received by them, taking out the light pieces and defacing them by a stamp, but that the Mint should undertake to buy these pieces by weight, giving new ones for them.

And if the Mint does not charge the one-fifth per cent brassage on such light coin, but makes the exchange by weight gratis, it makes a sacrifice in the matter which is already beyond its immediate functions; and this policy may be adopted as a compromise between the holders of light coin and the State.

It can not be asserted, for instance, that gold pieces of one-half or one-quarter dollar could be used, hence the idea of a limit in size must be maintained, and there can only be one true limit, so to speak. This true limit excludes the one-dollar piece at once; indeed, the two and one-half piece is somewhat below it, and all European mint masters agree with me that a gold piece of about three and three-quarter dollars should be the smallest. Unfortunately, almost all the monetary systems are committed to smaller pieces. Bearing in mind, however, that the one-dollar piece is absolutely away from this limit, it would seem to be injudicious to select it as "unit of value;" it would be like starting with an "imperfect" thing.

In section 14 I find the expression "of the one-dollar piece or unit of value." The term "unit of value" (rather vague wherever used) might best be taken as implying a standard of value. Now, the one-dollar gold piece is not a suitable piece, as experience shows, and such experience does not rest on mere practical results, but on principles connected with metallurgy and fixed mechanical laws, having reference to the difference between the resisting power of the metallic structure of the piece and the extent of surface exposed.

Indeed, I do not see why any coin of "denominational" value should be selected as a special valuator. The true valuator is the bullion itself by weight, irrespective of its division into pieces, and as the weight of the latter is led off from the divisions of the ounce, the ounce itself is the proper starting point. This practice is pursued by all the large States; thus, in England, 480 ounces standard gold = 1,869 sovereigns (these figures are so given because they are without fractions); in France a kilogram, 900 fine gold = 3,100 francs; in Germany (new law) the mint pound fine gold (one-half kilogram) = 465 thalers or 1,395 marks, and so might the United States do, say 43 ounces of standard (900) = $800 (this gives correct proportions without fractions).

Hence, section 14 might commence: "That the standard weight of gold coins shall be in the proportion of 43 ounces of standard gold to $800, viz, the weight of the double eagle, etc.," leaving out "or unit of value" in line 8. And if in addition thereto you could introduce "provided that the double eagle, the $3, and the $1 piece be manufactured and issued only by an express order from the Secretary of the Treasury." Thus you would not abolish these three pieces, but give liberty to try the more restricted variety.

The policy of using the ounce of bullion as the standard of value can best be appreciated by those who are fully acquainted with vigorous dealings and holdings in

bullion and the necessity and economy involved in acquiring and retaining it. In this respect America fails signally; the want of a suitable "reservoir" for holding bullion during the phases of international changes without coining it, leads to unnecessary mint operations and to losses, direct and indirect, in American commerce. In Europe we have large central banks (banks of England, France, and Prussia) which, by their note issue, thus hold uncoined bullion, receiving and parting with it. In my book (Suggestions, etc.) I have endeavored to make this clear.

It is very possible that Americans are opposed to such a central bank for a national issue based on bullion (as I have proposed it), and that as long as the Treasury must continue its policy of selling gold in the market against greenbacks the way is not clearly seen.

Nevertheless, that is no reason why some such system of "reservoir" for bullion should not be established by the Treasury through the Mint, or vice versa. I know what your usual Mint certificates are which carry with them the time taken by the mint in making the coin. I think that the system can be made to go further. Supposing, for instance, that such a clause as this were introduced into the bill:

"SEC. —. That it shall be lawful for the Secretary of the Treasury to issue, through the Director of the Mint, bullion certificates (payable to bearer) of gold bullion deposited at the Mint, such certificates stating the value of the bullion so deposited, upon the owner of such bullion paying the coinage charge thereon in United States gold coin; and if the value of such deposit exceeds the sum of $20,000 the Director of the Mint, at the option of the owner, shall have the right of paying the fractional sum above the last $1,000 in coin, issuing the certificate for a round sum in thousandths and deducting the coinage charge therefrom; and if the amount deposited be below $20,000 the owner of such bullion shall pay such additional sum in United States gold coin as will complete a round sum in thousandths: *Provided*, That at the option of the Director of the Mint such certificates shall be paid on presentation, either in bullion or coin, or in such proportions of bullion and coin as he may deem fit: *And provided also*, That if the owner of such bullion chooses to be paid in coin he shall receive in exchange thereof a Mint certificate specifying the time when such coin will be ready for delivery."

I do not know whether I have worded this section in American bill style, but I think I can show you its advantages:

1. It will entirely do away with the necessity of keeping a special mint fund, as provided by section 50.

2. It relieves the State of uselessly coining the gold, for the greater portion of American coins go to European melting pots (see Suggestions, pp. 24 and 25), and the monthly sales of gold are absorbed that way.

3. The Government will make the profit of one-fifth per cent coinage charge without having coined (a similar profit is made by the banks of England and France, which buy gold less the supposed coining charge and sell it at mint value).

4. The owners of such bullion certificates will be paid at once, and for shipment to Europe bullion is more profitable to them. (See Suggestions, pp. 197 and 198.)

5. If coin is insisted upon by the holders, they can get it on the usual terms by the ordinary coin certificates.

6. The provisions for the "rounding off" of the certificates in thousands, I think, are very useful and necessary in order to make these instruments convenient and popular, and the provisions as to the right of the Mint to insist upon a balance of coin to make up a round sum below $20,000 (or less) is, of course, expedient. For sums above that amount the Mint might keep a small reserve of coin.

7. The United States Treasury would, of course, hold the gold instead of the Mint, and might also hold the certificates, so as to maintain its control over the gold market as long as requisite.

I am convinced that this system will enable the Government to effect great saving in minting gold, lead to regular operations in supply, retain bullion in the country, and be much more satisfactory to the exchange market and the public.

Superior to this policy I hold the establishment of a large central bank (Suggestions, p. 68), but in the meantime I think that the above clause might well be included in the mint bill.

SEC. 25. *Assayer.*—It is essential in every mint law that the inspector of bullion should know "how the assay of gold" is to be stated. Is the assay to be in 1,000 parts, or one-half of thousandth parts, or in ten-thousandth parts. The importance of this will at once be apparent to you when I state that by the thousandth assay an importer would obtain say $9,900 for a certain parcel of bullion, whereas if the ten-thousandth part was stated he might obtain $9,999 or $9 more.

In the United States assays are stated at two-thousandths fine; in France at ten-thousandths fine. Why should the United States assayers not state the assay in the same way as the French?

I am perfectly well aware that the American assayers assert (in print and in speech) that they can not assay so fine, and that the liability to error ranges between one

and two ten-thousandths. If the American assayers were subject to the same competition as ours are here *they would soon learn how to do it.* I underline these words in the hope that you will not allow yourself to be jostled out of the wish to promote accuracy.

We have made numerous experiments here in Europe and find that although divergencies will occur of one-tenth per mille and occasionally two-tenths per mille, yet that on the whole the assays agree, and that, at all events, *the purchaser of bullion can not lose* because he has an almost entire one ten-thousandth part as a margin. In France the tariff for qualities of gold is at one ten-thousandth fine, and the assays at the Bank of France correspond with the independent assays of the mint for a coinage of 100 millions of francs (gold) within 132 francs, and that in favor of the bank.

French assayers pretend to go to one one-hundred-thousandth fine, and I am satisfied that it can be fairly done; yet in America the one two-thousandth is still maintained. Even the British mint has always assayed to one thirty-second grain fine, equivalent to one twenty-five-hundredth fine, and the Bank of England, in consequence of a pamphlet which I wrote (see Suggestions, p. 174) altered its assay system to one thirty-three-hundredth fine, although it is not a Government concern. All our British and continental assayers state assays to one ten-thousandth fine; several go to one one-hundred-thousandth parts (in half .005).

I think that the least Americans can do is the adoption of the one ten-thousandth part; rely upon it, all opposition in this is captious. I trust that there are really scientific men in the States able to make such accurate assays; but I maintain that if even they are unable to vindicate the rights of scientific accuracy, and if they continue to insist upon errors between one and three ten-thousandth, the system should nevertheless be adopted, because, as said before, the Mint or the purchaser of bullion can not on the average go wrong, and above that he has an entire one ten-thousandth reserved. So in section 25, at the end of line 2, there should be the words: "In tenths of milliemes," a technical term perfectly understood.

SEC. 26. In my book, "Suggestions, etc." I recommend a coinage charge of one-tenth per cent, and if the organization and machinery of state mints were perfected (see "Improvements in the process of coining," in the Society of Arts Journal, sent herewith) that rate would cover the actual working expenses. I am opposed to the so-called absolute free coinage, and I am glad to observe that you propose one-fifth per cent at all events as an installment, and I hope it will not be increased. The charges for refining, melting, etc., ought to be put at as low a figure as possible, or even at a sacrifice to the Mint.

SEC. 36. The "allowance" or remedy for gold of only one one-thousandth in fineness is an improvement; in England and France it is two one-thousandths. This advance in favor of accuracy in America strengthens my demand for assaying to one ten-thousandth part fine, as remarked on section 25.

SEC. 39. The allowance for deviation in the weight of the half eagle is in accordance with the practice here, but for the $2.50 and $1 pieces it is far too large; the $2.50 piece ought to have but one-eighth or one-sixth the dollar, say one-tenth of a grain.

SEC. 46. Allows to the melter and refiner one-thousandth part of weight for gold and one and one-half-thousandth for silver waste, and to the coiner one half-thousandth for gold, and one-thousandth for silver waste. These are enormous allowances, which, in my opinion, are tantamount only to "legalizing pilfering" to that extent.

I altogether repudiate the suggestion that any material can be absolutely lost in the melting or coining. I admit that during the process of melting copper may oxidize, but in that case the gold or silver alloy becomes finer, as the assay by one ten-thousandth would show. Careful manipulation and proper heating lessens this liability, and if, after all, the melter thoroughly knows his business, he can find out the average oxidation, and should be allowed to make a slight surcharge of copper, say one-tenth per mill, to counterpoise it.

The "evaporation" of pure gold and silver only takes place when the metal is much overheated, and particles of it, by stirring, go up the flue, where they can be found. This subject has been well tested here and elsewhere, and the evaporation has been found so infinitesimal that one one-hundred-thousandth part will cover it over and over again, notwithstanding all the assertions and statistics of other mint officers.

Supposing, then, that the above-mentioned surcharge of copper is so that a loss of weight to one-tenth per mill becomes possible, and, making a liberal allowance for so-called "evaporation," I maintain that a loss of one-tenth per mill ought to cover the whole; yet your bill allows eight times as much for gold and twelve times as much for silver.

But it will be said, "There are spillings in casting, traces of metal adhere to the pot," etc. I know all that; but they can all be got out of the "sweepings," they

can not disappear, and if I allow another one-eighth per mill, i. e., one-fourth per mill for absolute (?) loss in melting, all these contingencies are covered; the rest, three-fourths and 1¼ per mill, are simply stolen.

Under melting and refining I presume that you understand the melting and bringing to standard of gold, but not the process of "parting," by acids, here called refining, for these "parting" operation, properly speaking, are separate from the business of the mint and conducted by private refiners. The parting process does not give any loss; on the contrary, as the assay is always higher, it yields more gold. (The spilling and dropping about of metal can be altogether avoided if the plan of casting plates be adopted as recommended in my paper in the Journal of the Society of Arts, p. 178, for the whole melting pot can be emptied at once into the mold.)

You are no doubt in possession of a book on the British mint, written by Mr. G. F. Ansell, wherein you will find this business of losses well laid open. On page 101 of that book is a condensed statement showing that the highest loss ever made by that mint in melting is not quite four-tenths per mill (in 1868–69), whilst in the years 1857–1866 it was as low as sixteen and one-half one-hundredths per mille (Mr. Ansell then managing the mint), and the high loss of four-tenths per mille is clearly owing to the fact that the work is badly done, and that frequently spillings are "purposely" made. Yet you would give them permanent authority to lose one-tenth per cent. I assert that a conscientious melter, one who looks well after the men, does not require such an allowance.

In the coining department no loss whatever is possible, unless the work is done bad purposely. Slight traces will sometimes color the rollers, or the oil may carry with it small atoms, but any bit or strips, no matter how small, must be found in the sweepings. The statement on page 101 of Mr. Ansell's book shows that from 1851 to 1857 the losses in the coining department of the British mint were very high (when several prosecutions for pilfering were instituted); since then, as the statement shows, they have been very trifling, and during Mr. Ansel's time there were slight gains, as there should be, for the 1,000 sovereigns (previously weighed singly) may be short only by 5 grains, to produce the average of grains stated on 1,000,000 pieces.

The lowest total loss in melting, standarding, and coining in England since 1857 is 140 per million, and the highest 330, yet your bill allows a margin of 1,500 per million. And if you take into account that the assay at the mints in the United States is stated at only one one-half thousandth, giving an average surplus of one-fourth, or 250 against the British mint margin of one thirty-second grain fine, one-eighth or 125 average, the total allowed by you, would be 1,650 per million.

This is so extravagant and extraordinary that I must protest against it, notwithstanding all the experience and statements of the mint authorities.

Compare this allowance, for instance, with the French mint law. The French contractors receive 6.70 francs for coining 3,100 francs—2,170 per million. They are credited and debited with over and under weight; they take the metal at one ten-thousandth part of assay, and in the trials of their coins they are rigorously credited and debited with fineness over or below the one-thousandth part—i. e., if the coin assays, say, 900.2, they are credited with the "2;" if, say, 899.7, they are debited by 3. They are consequently bound hand and foot, and dare not allow any waste. If they conceded 1,650 per million out of the 2,170, they would only have one-half per mille left.

It may be alleged that pilfering by the men can not be prevented. Let me assure you it can. The French contractors do it, and turn out their men if they find any unusual discrepancy, and the men know that they must not rob their employers. In the British mint there is no such guard, and if in the United States you actually legalize the allowance of 1,500 per million, you may depend upon its being made use of.

The best plan is to make no allowance at all, but let the published returns speak for themselves, or, if limits be thought advisable, let them be fixed at no more than one-third of the rates named by the bill, with the understanding if the losses exceed these rates that an inquiry shall take place, which, if not clearing up the matter, will lead to the discharging of the men. I maintain that if the responsible melters and coiners earnestly take the trouble to show the men how to melt, cast, and coin (and no one should be so appointed unless by his own hands he can show and train men), they may prove "how gold and silver can not be lost," and that must stand as a precedent for future proceedings. The discharge of men should not be feared; a working chief melter and coiner can always train new hands, if he has a mind to do so.

I know very well that in enlarging upon this subject I touch upon an often-discussed chronic mint sore, but I know that I am right.

In pleading, then, for legal enactments in favor of the one ten-thousandth part assay, for better machinery, and the avoidance of "legalizing" waste, I request you

to recognize my wish that the United States may succeed in vindicating the principles of "accuracy" in their mints.

SEC. 50. I think that if the suggestion in reference to the bullion certificates alluded to before be adopted the fund in question will be but a very moderate one.

SEC. 51. I now come to the most important part of the bill, that of the valuation, which, according to section 15, omits the coinage of the silver dollar and confirms the debased silver coinage of half dollars and below, under the tender limit of $5. I am aware, of course, that through the amendment of 1853 the same debased coinage was already established; but although the actual coinage of the silver dollar had practically ceased, still that piece was not abolished by law. As this new bill presumably repeals all previous enactments, I suppose that the total abolition of the silver dollar is contemplated.

In my book (Suggestions) I enter fully into the discussion of this matter and show the gigantic consequences to international as well as national trade through the demonetization of silver to which the United States would thus lend a helping hand, and for a number of years this subject of the abolition of silver as tender coin has occupied the attention of European economists. It is the question of the age, and takes precedence of every other matter involved in monetary science.

Unfortunately the subject requires not only a thoroughly practical knowledge of exchange matters, the principles of valuation, for which very few people have inclination, and so it happens that even the framers of mint bills do not grasp its importance, as I have found before. You yourself, in your letter to Mr. Latham, referring to my book, make the remark: "As to the theory of the double valuation, I do not understand it." I infer from this that you have remained a stranger to the controversy, that you have not as yet formed an opinion as to the merits of it, and that you have framed your bill in favor of the absolute gold valuation according to that which has been of late the practice in the United States if not the law.

Permit me to beg that you will first investigate the question of double *versus* single valuation. Chapter III of my book, "Suggestions," etc., opens the question, Appendix, Notes VIII (p. 201), the consequences of the gold valuation, and IX (p. 212), the injustice of the gold valuation. Treat the matter in their international and national aspects, and they may furnish you sufficient materials for reflection.

Other writers, such as Mr. Wolowski, in France, and several other French, Dutch, and German authorities, defend the double valuation on the same grounds.

The great portion of English economists defend the gold valuation, but several of them have lately come over to my views, and one of them, the most important and a staunch defender of English institutions, to whom I shall presently allude, has agreed with me as to the advisability of modifying the English gold valuation, which is even less strict than that adopted by your bill for America. These pages do not afford room for the whole discussion of the subject; therefore I beg you will read the parts of the books quoted, so as to form an opinion of it.

Apart from the theory, Why should America have given up her silver dollar? the cause of its disappearance from circulation is due to the original error of there being too much silver in the piece (see p. 52 of Suggestions). That cause would have been removed if the dollar weighed 400 grains, that being the true proportion of 1 to 15½ gold to silver, instead of 412½ grains as by the old law.

Why should it not be reintroduced at its true full weight of 400 grains and become again one of the active agents of commerce? The charge of weight as against the individual piece does not hold good when two half dollars are of nearly equal weight and same value. Railways and steam transport large masses with great facility when compared with previous times.

Do you fear its undue exportation? If so exported, America will get its equivalent for it, and the rich silver mines of the country can give any fresh supply of it; therefore, the more it is exported, the better it is for America.

I think that the United States, with both her gold and silver mines, is in the eminently favorable position of upholding the full use of both gold and silver, and that the double valuation (as it existed before) would be of great benefit to the country; but you may, nevertheless, giving away to the one-sided arguments of English economists, incline to the gold valuation, and express the fear "that if America adopts the silver dollar and lays itself open to the coining of these pieces for the public to whatever quantity of silver may be sent in from coinage from abroad, and if full legal-tender value is given to such pieces it may be placed in danger of losing gold and obtaining too much silver currency."

That is the only fear to be apprehended, and certainly as long as England and other countries are in conflict as to the systems of valuation, this may be the case.

France, however, by her system of double valuation accumulated more gold bullion than any nation has ever had, having within the last twenty years coined two and one-half times as much as England, and if the universal valuation was a double one, i. e., both metals in equal use, these fluctuations would altogether cease.

Against this danger of too much silver America can guard itself without the total

abolition of the full-valued silver dollar. It is but necessary so to modify the severity of the gold of valuation as to admit of a reasonable use of silver dollars. Supposing that a certain amount of silver dollars of full value (400 grains) were issued, coined for the owner at a charge of, say, 1 per cent mintage, and that the limit of tender for such pieces were fixed at, say, $50 to $100, would this in any way interfere with the supremacy of the gold valuation? I contend that the gold valuation would remain supreme with either of these restrictions, viz, either a certain limited issue and giving full-tender weights to the coin, or with unrestricted issue limiting the tender value.

Both restrictions combined will undoubtedly prevent any excess, and if under them certain amounts were so issued and used the issue of more might be made dependent thereon; so that while for the present the gold valuations were maintained in full force the door would not be shut abruptly and forever on silver; and pending the future international settlement of a universal system of valuation the pure double valuation might be found not only practicable but necessary. I urge this upon you, not only on cosmopolitan grounds but also in the interest of American silver mines, for if America, so important a part of the world, rushes blindly and irrevocably into the gold valuation and thus contributes to the general terrible error, the value of silver must fall greatly (see Appendix, Note VIII, the consequence of the gold valuation) and all the arrangements made, even with the debased silver coinage, fall to pieces.

America, then, should hesitate to enter upon this course without a full previous investigation of the immensely important considerations appertaining thereto.

The proper issue of silver dollars might be provided for in the bill by the introduction, between sections 14 and 15, of some such—

"SEC. —. That of the silver coin the weight of the $1 piece shall be 400 grains, which coin shall be legal tender at its denominational value to any amount not exceeding $100 (or $50)."

And this would have to be followed, between sections 21 and 22, by—

"SEC. —. That the charge for converting standard silver into silver dollars, whenever the Mint is ready, according to section —, to coin such silver dollars, shall be 1 per cent."

The object of these clauses will be apparent to you. The Secretary of the Treasury may commence, for instance, by authorizing the coinage of one million of silver dollars. The holders of the silver bullion would gladly pay the 1 per cent charge rather than send the bars to Europe. What risk would the holders of these dollars run? Even supposing that the public positively refused to take these coins, the holders could sell them as silver to Europe; but I believe that they would be welcomed even without the law of tender. And, if you succeed by the force of legal tender in compelling people to take in payment coins debased by 4 or 5 per cent to the amount of $5, why should not you succeed in placing coins of full and honest value into healthy circulation?

So, if the first million succeeded, the Secretary then might authorize more, encouraging it even, whilst at any time, by ceasing his advertisement, he could foreclose the Mint against an excessive importation of silver from abroad.

You will also perceive that the reintroduction of the silver dollar is a necessity, seeing that the $1 gold piece is an unsuitable coin, and that it can take place without disturbing clauses 14 and 15, the latter providing for the issue of debased half dollars, quarters, and dimes as they are now.

Indeed, I must wish also that the half dollar should be of full value, so that the issue of those pieces should not be guided by the more or less faulty human judgment of the Secretary of the Treasury, but by the pure action between supply and demand. I put the "supply" first as the active "demand creating" element in all matters of commercial intercourse. But as the debased half dollar is already in use, it may be best not to disturb it now, whilst the whole silver dollar can be introduced again without any disturbance in the other coinage.

I quite recognize the necessity of giving the character of tokens to copper coins and to lower-class silver coins. What I contend is that "enough is the evil thereof," and that it is wrong to extend this character of tokens to coins which, like the dollar and half dollar, are so important in social intercourse, and where supply should not be restricted by unfavorable laws.

I may now mention that Mr. William Newmarch, F. R. S., who, as president of the economical branch of the Social Science Congress, lately delivered an oration on the advantages which he supposed England had derived from the gold valuation, nevertheless agrees with me that we in England might with advantage issue a full-valued 4-shilling piece without disturbing the gold valuation, and that we might thereby militate against the evil of a constant or periodical scarcity of silver coin in the hands of the lower classes and a correspondingly constant or periodical sole surplus in the hands of bankers.

In a lecture delivered before the Statistical Society in February, 1871, on "Cur-

rency laws and pauperism," I showed that excessive poverty and idleness in England among the lower classes was due to the restricted supply of mediums of exchange suitable to their wants as means of intercourse between themselves, and that the scarcity of silver coin was the consequence of the severe laws oppressing the use and debasing the value of this kind of money. (The substance of this lecture is contained in Appendix, Note IX, "Injustice of the gold valuation," in Suggestions, etc.) I there proposed as a mitigating measure the issue of full-valued 4-shilling pieces, and I have from many well-informed quarters received sufficient encouragement to anticipate that in spite of the strong prejudice and want of spirit of inquiry prevailing in England in reference to such questions it will be seriously considered. Now, the United States gold valuation is even more severe than in England, for whilst here the limit for silver is £2, or $10, it is but $5 with you.

I venture, therefore, to recommend to you the introduction of these clauses in favor of the silver dollar. At all events, I hope you will fully investigate this subject before you commit America to this course of the one-sided gold valuation.

Men like yourself, on framing a coinage bill, undertake a gigantic responsibility, which strongly affects, not only a whole nation's welfare and happiness, but also that of the world at large. Pray do not despise this language. The deep study of all the principles and interest connected with the organization of social life warrants it.

Obscure as this subject is to many people, they succeed in establishing their work, and when it once stands it is like a fate decreed, to which all must bow, because they do not see its evils clearly and it is difficult to amend it. Nay, as an existing thing it is defended and elevated into a principle, although the original principles on which it was founded were quite at variance with the subsequent facts.

In this respect the English legislation of 1816, which established the gold valuation, furnishes a striking example. At that time nobody dreamed of California and Australia, and, as the literature of the time shows, a comparative scarcity of gold was anticipated and England urged to secure a share by its new system. But how completely have the conditions been reversed!

So with Michael Chevalier in 1850. First he wrote down gold and recommended its demonetization; then he turned the table upon silver. Now he is in doubt, inclining to Wolowski's views.

From England, of course, you will, for some years to come yet, hear views in favor of gold valuation, and altogether you must expect from here the tendency of making tokens of all the lower classes of coin. Our esteemed mutual friend, Mr. Alfred Latham, even goes so far as to declare that the half sovereign might be made a token. Where are the principles to justify such a view? Do they lie deeper than the natural sense of equity, or is the suggestion one arising from surface experience? I imagine that there can be but one truth, and that this truth can not be supplanted by mere expedients which, in violating it, draw consequences after them of which their authors can not give an account, because, forsooth, they mistake a certain degree of prosperity as brought about by these very measures, whereas that prosperity rests on quite different grounds and would be greater if these unjustifiable violations of truth did not irrevocably damage the interests of certain sections of the community.

The whole question of token currency, or rather that of the portion of token currency in any monetary system, is as yet in its infancy. Historical experience and plain common sense have, however, established the fact that the levying of seigniorage on all descriptions of coins is impossible, and that the so-called standard coins at least must be of full value.

On the other hand, experience has shown that copper coins and the lower-class silver coins can be issued with a heavy seigniorage without any apparent damage to the interests of those who use them principally. Yet that this damage does nevertheless exist is plainly shown; the conversion of the masses of copper coin into standard coin, for instance, is very difficult.

In the brewery business here there are firms who sometimes hold £5,000 or £6,000 in copper and small coins, and can not pay them away. The loss of interest and working power on capital thus accruing must be charged on their manufacture, i. e., the consuming poor must pay more for it, and are thus unduly taxed. Again, as the issue of such copper coin is more according to the good and bad judgment of the authorities, the large sums thus accumulating withdraw a portion of the means of exchange supposed to be measured out for the intercourse of those who require them.

I will, however, concede that the issue of such debased copper coins can not be avoided, and that the evil must be borne; and here I must remark that section 33 of the bill which authorizes the United States mints to redeem copper coin in national currency is a proper measure, for it will prevent the accumulation of copper coins in private hands, and give the holders, though in a roundabout way and not without charges of forwarding, etc., the chance of converting it. In Europe we follow a different policy; the mints undertake no such obligation and do not redeem copper coin for this reason: The stamps of their copper coin can be so well imitated that

the mint itself, especially if the coin appears to be a little worn, can not distinguish false pieces from their own, and, as the manufacture itself leaves about 60 per cent clear profit, forgers will set to work, provided that they could freely dispose of such pieces.

Fortunately, it is impossible here to dispose of copper coin by way of tender value for more than a few shillings at a time; hence, the thing does not pay (nevertheless false copper coins are known to exist). But if, as you contemplate by section 33, the Mint is to redeem copper coins in sums above $50, i. e., giving them, so to speak, their tender value, you may be sure that false coins will soon take advantage of this facility. So that, although I call it a proper measure for one purpose, it will bear its penalty in another way, and I am, on the whole, inclined to favor our European policy, provided that the evil of seigniorage be not attached to the higher-class coins, viz, the full-valued standard of gold pieces and large silver coins, and confined only to copper and the lower-class silver coins. For in this extreme extension of the application of seigniorage lies the whole error.

When those who favor a full-valued silver coinage plead their cause on the ground that the principles of justice and logic demand that a whole thing (say a standard coin) can only be divided into parts of equal value, and that those parts ought again to give the whole in substance or in true equivalent value, they are told, Why, then, you must include the copper coins as a standard, and permit anybody to make payments of, say, $50,000 in copper coins, and that would not do.

We quite agree with this, but we allege on the other hand that "enough is the evil thereof," and that the necessity of thus limiting the tender value of copper is no justification for also and entirely limiting the tender value of silver, for, if it be maintained that no interest can suffer when the coin concerned is of the value of 2 or 4 shillings, we have the right to say that you might extend seigniorage to pieces of 10 or 20 shillings in value, which, we have all agreed, can not be done.

The question, then, between these two views is one of degree, and the thing to be determined is, where is the right point of value below which token currency may be admissible and above which the medium of exchange must be of full value?

What should govern this decision?

The advocates of the gold valuation say "gold," i. e., they decide the point in question according to the usually recognized proportions of value between gold and silver as 1 to 15½, and say thereby, "We also gain a unity of value." Now, the basis of prices as between commodities and the precious metals has nothing to do with the proportionate value of gold and silver; it is so far immaterial whether a measure of value of 4 shillings (or more or less) be made of gold or silver or any other material, and so these proportions between gold and silver can not furnish the principle upon which the question is to be decided.

We, on the other hand, say the decision should be governed by the idea that this evil of token currency must be suppressed as much as possible, and that, as a thing essentially bad, contradictory, and unjust, it must be kept under even at the sacrifice of the supposed advantage of a unity of standard. And this includes the idea that whereas those who are able to deal in gold complain of silver as too heavy for the pocket they must nevertheless bear with this inconvenience for the sake of those who deal principally in silver.

As to the idea of unity of standard, although we dispute its validity, inasmuch as we allege that, for the maintenance of the just value of gold, silver is a necessary adjunct whose value must not be suppressed, we might for a moment admit this consideration: If there were gold enough in the world to furnish all the means of exchange required for money, this unity would be possible, and so even the lower kinds of money could be made from gold, in which case however, the value of gold must have fallen so very much below what it is now that the objection of weight would rise again with greater force.

If a $2½ piece or a $1 piece were worth in commodities but 50 or 20 cents, all the trouble for effecting the payments in large quantities would be revived.

Without this fall in the value of gold all the coins which can not (on account of their smallness in gold) be made of that material must thus, under the single gold valuation, be forever condemned to the position of tokens. And when all other nations, in self-defense, following the examples of England and America, are compelled to demonetize silver, the inevitable fall in the value of that material must be added to that of gold, so that the rise in the value of gold will increase the baneful effects of the debased silver coinage.

But, you may ask again, "Where is the mischief? A half dollar, though debased, passes for a half dollar, and no one seems to complain."

The mischief is this: A token currency, as part of a system combined with full-valued coins, must be kept within very narrow limits as to issue. Whilst the full-valued coin can be issued freely, and finds, by its very nature, free ingress and egress, the token currency can not be issued excepting for what appears absolute necessity; its issue must be restricted, its export must be prevented by debasement.

Whereas, for instance, if the mintage of the whole set of coins were left free to the action of international and national trade, there might be in any country, say, 200,000,000 of coins of larger value (such as gold coins) and 60,000,000 or 100,000,000 of coins of lesser value (say silver coins), so as to suit the intercourse between all the stages and in the mutual intercourse of each stage of society. No such proportion can possibly be arrived at where such lower coins are condemned to be tokens. It has been ascertained that we in England can not use more than 10 per cent of tokens, and even with that limit we find a surplus in the hands of bankers, and consequently so much short for the wants of the people. Hence, the proportion to the above supposed 200,000,000 is but 20,000,000 of tokens or coins below 10 in value. And these 20,000,000, despoiled of their metallic value and placed under severe restrictions in payment, may be called the scanty offal of the monetary system with which the less wealthy must be contented.

That the rich do not complain of this state of things is explicable; it does not directly affect them; on the contrary it makes the lower classes more dependent. "Then, why do not the poor complain?" may be asked. Is it to be expected that Dick, Tom, and Harry, the workmen, should study social economy, so as to be able to propound the doctrines of truth and the practical value of their applications to a subject so obscure as that of money is to most men? Enough that in vague terms they complain of a scarcity of money, of idleness, and want of work, and that this idleness and want of work are in direct relationship with the available means of exchange for intercourse, you may admit if you lend an ear to the arguments in the following passages:

Money is the absolutely necessary element in effecting exchanges in commodities, i. e., for carrying on intercourse, i. e., the consumption as well as the production of commodities; hence the numerical presence of money to a great extent guides the number of transactions in either direction. In this sense a supply of money encourages, a diminution of money lessens, the number of transactions.

So well is this rule recognized in all schools of national economy that we in England pride ourselves specially upon the freedom which we give to gold for its import, export, and free coinage. We know that by exhibiting a "demand" for gold, and acting accordingly, we can obtain it, but we take great care not to bar its supply in any way; we do everything in order to encourage it, recognizing that in the theory of supply and demand the former is the really active, positive, and productive agent; whereas the old theory contented itself by adhering to the false doctrine, "the demand rules the supply."

We feel and know that this free supply does not only encourage our international trade, but also (and what is more important) our own inland intercourse between ourselves, as it encourages consumption and production. The universal presence of sovereigns increases the demand for consumption.

It is evident, however, that the benefit of this enhanced consumption can, in the first place, be enjoyed only by those who can afford to deal in sovereigns, i. e., by those who are wealthy enough to consume twenty times as much as others—those to whom the sovereign is no more than a shilling to others.

For the purpose of this latter class (those to whom the shilling is as important as the sovereign to the wealthier) it would thus seem reasonable that the shilling should also be supplied with the same freedom, so that the consumption pro rata should be guided by the same rule, encouraging in its turn production and labor. A very large section of our poorer community is benefited no doubt by the supply of gold coin coming into this country, as also the industrial classes laboring for the international trade and the inland consumption of the wealthier; but this is, so to speak, only a partial matter, for by far more important is the consuming power of the people themselves.

More that three-fourths of the inhabitants of this country for their daily or weekly transactions use silver coin—must give silver coin, because the amounts involved can not be paid in gold. True, if an individual in that class receives a sovereign he can get it changed (though not without trouble and even at times with the tax of a glass of beer as an excuse); but that is not the point, for this question of change for one or more sovereigns stands apart from the great question of the universal supply of the less valuable mediums of exchange for the purpose of encouraging and developing consumption and production between this three-fourths of the nation themselves.

Thus, whilst, for the reasons given, we supply gold coin freely, we in England follow the directly contrary course with regard to the less valuable mediums of exchange. We debase them, limit their tender value, close ingress and egress, and thus confine the whole of this great national intercourse between the majority of our people to within a narrow compass or cage, in which it becomes crippled. Hence, the want of supply limits consumption, the want of consumption limits production; hence, idleness, poverty, demoralization, and crime. Tom, Dick, and Harry, with their wives and families, stand idle and become demoralized, not, forsooth, that

there is a want of food in this country, for there is enough to eat, but because there are not mediums of exchange sufficient to set the one going to produce something for the other—some of those many things, beyond meat and drink, which, made from cheap and abundant raw material, assist and comfort in bearing life, keeping the one as well as the other to God-ordained modest labor and morality, and profiting both. And for the prevention and violation of these sacred rights I hold responsible the men or soi-disant economists who have framed our monetary laws, who insist on saying, and try to prove by all the sophistry in their power, that a despoiled shilling is nevertheless not a despoiled shilling, and that they may rob Peter to pay Paul with impunity.

Men of that class who have made their fortunes in international trade, have no other eye for anything else than custom-house statistics, or the rules of competition in our manufacturing districts. They overlook altogether the minor and far more important life of the people themselves, and say to them, "Here, we want gold; you must be content with bad silver, and we can not give you much, because it is inconvenient to us," and with this offal, which even in that sense is not supplied freely, and is kept within very narrow and unnatural limits, the people must be satisfied.

A curious feature in connection with this matter is the oft-repeated saying: "There is no demand for silver." Blowing hot and blowing cold. First praising supply of gold, then calling for a demand of silver before it is supplied. I say the demand for silver has been destroyed, the strength to use it is gone, pauperism is too great to make a demand such as would satisfy the authorities. And what kind of form must the "demand" take in order to force a supply? How far must the agony go in order to burst its bounds? Some time ago a general cry arose throughout the country on account of the scarcity of silver. There were people who ascribed this to Colonel Tomlin's effort to agitate the subject, as if that gentleman had bought up and hidden many millions of silver. But the demand seemed genuine, for it was impossible in some parts of England to find silver. The authorities took care to show that the demand was accidental, and promised that as soon as the Mint had finished coining gold, in a few months, it would coin silver.

Yet during this time the demand had to wait, and many hundred thousands and millions of modest transactions between the poorer and industrial classes, from which they might derive comfort and sustenance, could not take place. This accidental demand for silver was a mighty effort of the crippled intercourse, caused by offers for mutual exchange, which exchange could not take place because the means were absent. The sick man tried to rise, and had a craving for nourishment; he fell down again because it could not be given him when he wanted it. Since then the mint has coined much silver, but the demand is gone again and our bankers will soon cry out and complain of too much silver. Lessons like these are lost upon our economists. Who can wonder that they utterly failed to recognize the silent suffering of our poorer classes, less versed in social economy than themselves, when they refused even to profit by such manifestations which so completely bear out all that we, the advocates of the double valuation, have brought forward? And if you bear in mind the great gulf that exists in Europe between the ruling classes and the people, the deep root of prejudice against their rising, the peculiar kind of charity and charitable social economy whose stock arguments rest on abuse of the lower classes, with just so much effort for elevating them as "caution" may admit, you might come to the conclusion that scarcely anything short of rebellion will be found strong enough to serve the authorities as sufficient manifestations of demand for "silver."

To this point I am certain we must ultimately come. Grave political questions may occupy the world for some years to come, but this question will be one of the rest. Rebellions for similar objects have happened before in the present age when international commerce and more "refined" trading reduces margins to more mathematical precisions and thus leads to a more definite and clearer appreciation of differences in theory and practice; and the glaring injustice perpetrated by such proceedings as here laid bare will be recognized with unerring force. And although England has been prosperous, and though her prosperity is vaunted as a truth in opposition to what I have here said, yet it will be recognized that this prosperity is due to other causes and is not due to the monetary laws, but that her excessive pauperism can be traced to their injustice; and although I hope that England will continue prosperous, yet I anticipate that this prosperity will be enhanced by a reform in her monetary laws, i. e., by the adoption of the double valuation. It may be alleged, indeed, that as a universal trader England would have done much better with the double valuation.

You may, or may not, be disposed to attach some value to these remarks respecting the systems of valuation, but you may think that America, so favorably situated as regards immigration and resources, need not regard the delicate distinction in the matter. But if the remarks here made are true and if you bear in mind that in many matters of social truths we look to America with great hopes and watch her example, you may feel disposed on cosmopolitan grounds to consider the matter.

On national grounds you may also come to the conclusion that inasmuch as many of the most thickly populated and industrial districts of America resemble districts in Europe and have before them an extensive future, the effects here set forth are worth guarding against. I may call upon you to do so when I remind you that the system of valuation proposed in your bill is more severe than the English one, because you limit the tender value of silver to one-half of what it is here; hence the supply of this coin must be more unnaturally restricted.

Permit me also to call your attention to another matter connected with this controversy in your bill.

Section 33 authorizes the Mint to redeem copper coins. Why should not silver coins be thus redeemed? Section 29 says: "It shall be lawful to transmit parcels, etc., under regulations." Why is not that as clearly stated as with copper? Both descriptions are tokens, and the fact that silver coin contains comparatively more value than copper coin is of little consequence, for in its character as mere token it might indeed contain less. I have no doubt that here you are in a quandary, and fearing that silver "privately coined," or "artificially abraded," might be presented in large quantities to the Mint, you guard yourself by the indefinite regulations to be proposed by the Director of the Mint.

The thing is a sort of Gordian knot, a consequence of the whole unjust system of the gold valuation, which can all be avoided if you take the course previously recommended by me, viz, "that of issuing a full-valued silver dollar as the piece to stand between your gold coin and your debased silver coinage."

I am myself, as you will perceive from my writings, and others with me, in favor of the full and complete adoption of the double valuation, giving full legal tender to coins as low even as one-fourth dollar in value, believing that this is the only true system upon wich a future universal system of coinage can be based. (See Suggestions, p. 167.) Nevertheless, recognizing the difficulty of carrying this point at present, and in order to enable you to uphold the essential features of the gold valuation, I limit my recommendation to the issue of this single full-valued dollar piece, under the proposed restriction of tender value to $50 or $100, partly for enabling you, without drawback or inconvenience whatever, to widen or to close the valuation question at any time, and partly in order to relieve you of the unsuitable obligations of the Mint to redeem a surplus of either the token silver or the token copper coinage.

For if such a full-valued silver dollar is issued there will be no need of so many half and quarter dollars. The sordid consideration that the Mint would thus make less profit will not, I trust, interfere with this consideration. The matter should be left to its natural development, and if more half dollars are wanted it might be found suitable to convert the whole dollars as they are presented for the purpose to the profit of the Mint.

I think that such a whole dollar would be the bridge, and that if it were issued the Government might (like we do here) altogether drop the obligation of redeeming silver tokens (whatever regulations may be contemplated) excepting such as are worn light and defaced, and the equalizing tendency of the issue might even compensate for the dangerous necessity of redeeming copper coins, which, as here, might be left to be dealt with by the public.

I trust these lengthy remarks will not be tedious to you. The frankness with which you asked for criticism on the bill has induced me to make them; and when a man's life has been passed in the study and the practical handling of a matter like this he can not well help in bringing forward as much as he hopes may be useful; and in the case of the United States, where I have lived many years and where I have studied social economy from an American point of view and am now able to extend this view, I imagine that that which I have proposed to you is not contrary to American habits and customs. The national currency has no doubt changed some of the conceptions in reference to money, but the original truth that solid, full-valued currency is the best will ultimately assert its authority.

I am, dear sir, yours, very obediently,

ERNEST SEYD.

P. S.—I have sent to you in parcels, by bookpost, addressed: Samuel Hooper, esq., M. C., Bullion and Foreign Exchanges; Suggestions on American Coinage; Demonetization of Silver, several pamphlets, reference to which is made in this letter.

THE ACT AS PASSED AND APPROVED.

AN ACT revising and amending the laws relative to the mints, assay offices, and coinage of the United States.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Mint of the United States is hereby established as a Bureau of the Treasury Department, embracing in its organization and under its

control all mints for the manufacture of coin, and all assay offices for the stamping of bars, which are now or which may be hereafter authorized by law. The chief officer of the said Bureau shall be denominated the Director of the Mint, and shall be under the general direction of the Secretary of the Treasury. He shall be appointed by the President, by and with the advice and consent of the Senate, and shall hold his office for the term of five years, unless sooner removed by the President, upon reasons to be communicated by him to the Senate.

SEC. 2. That the Director of the Mint shall have the general supervision of all mints and assay offices, and shall make an annual report to the Secretary of the Treasury of their operations, at the close of each fiscal year, and from time to time such additional reports, setting forth the operations and condition of such institutions, as the Secretary of the Treasury shall require, and shall lay before him the annual estimates for their support. And the Secretary of the Treasury shall appoint the number of clerks, classified according to law, necessary to discharge the duties of said Bureau.

SEC. 3. That the officers of each mint shall be a superintendent, an assayer, a melter and refiner, and a coiner, and, for the mint at Philadelphia, an engraver, all to be appointed by the President of the United States, by and with the advice and consent of the Senate.

SEC. 4. That the superintendent of each mint shall have the control thereof, the superintendence of the officers and persons employed therein, and the supervision of the business thereof, subject to the approval of the Director of the Mint, to whom he shall make reports at such times and according to such forms as the Director of the Mint may prescribe, which shall exhibit in detail, and under appropriate heads, the deposits of bullion, the amount of gold, silver, and minor coinage, and the amount of unparted, standard, and refined bars issued, and such other statistics and information as may be required. The superintendent of each mint shall also receive and safely keep, until legally withdrawn, all moneys or bullion which shall be for the use or the expenses of the mint. He shall receive all bullion brought to the mint for assay or coinage; shall be the keeper of all bullion or coin in the mint, except while the same is legally in the hands of other officers; and shall deliver all coins struck at the mint to the persons to whom they shall be legally payable. From the report of the assayer and the weight of the bullion, he shall compute the value of each deposit, and also the amount of the charges or deductions, if any, of all which he shall give a detailed memorandum to the depositor; and he shall also give at the same time, under his hand, a certificate of the net amount of the deposit, to be paid in coins or bars of the same species of bullion as that deposited, the correctness of which certificate shall be verified by the assayer, who shall countersign the same; and in all cases of transfer of coin or bullion, he shall give and receive vouchers, stating the amount and character of such coin or bullion. He shall keep and render, quarterly, to the Director of the Mint, for the purpose of adjustment, according to such forms as may be prescribed by the Secretary of the Treasury, regular and faithful accounts of his transactions with the other officers of the mint and the depositors; and shall also render to him a monthly statement of the ordinary expenses of the mint or assay office under his charge. He shall also appoint all assistants, clerks, (one of whom shall be designated "chief clerk",) and workmen employed under his superintendence; but no person shall be appointed to employment in the offices of the assayer, melter and refiner, coiner, or engraver, except on the recommendation and nomination in writing of those officers, respectively; and he shall forthwith report to the Director of the Mint the names of all persons appointed by him, the duties to be performed, the rate of compensation, the appropriation from which compensation is to be made, and the grounds of the appointment; and if the Director of the Mint shall disapprove the same, the appointment shall be vacated.

SEC. 5. That the assayer shall assay all metals and bullion, whenever such assays are required in the operations of the mint; he shall also make assays of coins or samples of bullion whenever required by the superintendent.

SEC. 6. That the melter and refiner shall execute all the operations which are necessary in order to form ingots of standard silver or gold, and alloys for minor coinage, suitable for the coiner, from the metals legally delivered to him for that purpose; and shall also execute all the operations which are necessary in order to form bars conformable in all respects to the law, from the gold and silver bullion delivered to him for that purpose. He shall keep a careful record of all transactions with the superintendent, noting the weight and character of the bullion; and shall be responsible for all bullion delivered to him until the same is returned to the superintendent and the proper vouchers obtained.

SEC. 7. That the coiner shall execute all the operations which are necessary in order to form coins, conformable in all respects to the law, from the standard gold and silver ingots, and alloys for minor coinage, legally delivered to him for that purpose; and shall be responsible for all bullion delivered to him, until the same is returned to the superintendent and the proper vouchers obtained.

SEC. 8. That the engraver shall prepare from the original dies already authorized

all the working-dies required for use in the coinage of the several mints, and, when new coins or devices are authorized, shall, if required by the Director of the Mint, prepare the devices, models, molds, and matrices, or original dies, for the same; but the Director of the Mint shall nevertheless have power, with the approval of the Secretary of the Treasury, to engage temporarily for this purpose the services of one or more artists distinguished in their respective departments of art, who shall be paid for such service from the contingent appropriation for the mint at Philadelphia.

SEC. 9. That whenever any officer of a mint or assay office shall be temporarily absent, on account of sickness or any other cause, it shall be lawful for the superintendent, with the consent of said officer, to appoint some person attached to the mint to act in the place of such officer during his absence; but all such appointments shall be forthwith reported to the Director of the Mint for his approval; and in all cases whatsoever the principal shall be responsible for the acts of his representative. In case of the temporary absence of the superintendent, the chief clerk shall act in his place; and in case of the temporary absence of the Director of the Mint, the Secretary of the Treasury may designate some one to act in his place.

SEC. 10. That every officer, assistant, and clerk of the Mint shall, before he enters upon the execution of his office, take an oath or affimation before some judge of the United States, or judge of the superior court, or of some court of record of any State, faithfully and diligently to perform the duties thereof, in addition to other official oaths prescribed by law; which oaths, duly certified, shall be transmitted to the Secretary of the Treasury; and the superintendent of each mint may require such oath or affirmation from any of the employés of the mint.

SEC. 11. That the superintendent, the assayer, the melter and refiner, and the coiner of each mint, before entering upon the execution of their respective offices, shall become bound to the United States, with one or more sureties, approved by the Secretary of the Treasury, in the sum of not less than ten nor more than fifty thousand dollars, with condition for the faithful, and diligent performance of the duties of his office. Similar bonds may be required of the assistants and clerks, in such sums as the superintendent shall determine, with the approbation of the Director of the Mint; but the same shall not be construed to relieve the superintendent or other officers from liability to the United States for acts, omissions, or negligence of their subordinates or employés: *Provided*, That the Secretary of the Treasury, may, at his discretion, increase the bonds of the superintendent.

SEC. 12. That there shall be allowed to the Director of the Mint an annual salary of four thousand five hundred dollars, and actual necessary traveling expenses in visiting the different mints and assay offices, for which vouchers shall be rendered, to the superintendents of the mints at Philadelphia and San Francisco, each four thousand five hundred dollars; to the assayers, melters and refiners, and coiners of said mints, each three thousand dollars; to the engraver of the mint at Philadelphia, three thousand dollars; to the superintendent of the mint at Carson City, three thousand dollars; and to the assayer, to the melter and refiner, and to the coiner of the mint at Carson City, each two thousand five hundred dollars; to the assistants and clerks such annual salary shall be allowed as the Director of the Mint may determine, with the approbation of the Secretary of the Treasury; and to the workmen shall be allowed such wages, to be determined by the superintendent, as may be customary and reasonable according to their respective stations and occupations, and approved by the Director of the Mint; and the salaries provided for in this section, and the wages of the workmen permanently engaged, shall be payable in monthly installments.

SEC. 13. That the standard for both gold and silver coins of the United States shall be such that of one thousand parts by weight nine hundred shall be of pure metal and one hundred of alloy; and the alloy of the silver coins shall be of copper, and the alloy of the gold coins shall be of copper, or of copper and silver; but the silver shall in no case exceed one-tenth of the whole alloy.

SEC. 14. That the gold coins of the United States shall be a one-dollar piece, which, at the standard weight of twenty-five and eight-tenths grains, shall be the unit of value; a quarter-eagle, or two-and-a-half-dollar piece; a three-dollar piece; a half-eagle, or five-dollar piece; an eagle, or ten-dollar piece; and a double-eagle, or twenty-dollar piece. And the standard weight of the gold dollar shall be twenty-five and eight-tenths grains; of the quarter-eagle, or two-and-a-half-dollar piece, sixty-four and a half grains; of the three-dollar piece, seventy-seven and four-tenths grains; of the half-eagle, or five-dollar piece, one hundred and twenty-nine grains; of the eagle, or ten-dollar piece, two hundred and fifty-eight grains; of the double-eagle, or twenty-dollar piece, five hundred and sixteen grains; which coins shall be a legal tender in all payments at their nominal value when not below the standard weight and limit of tolerance provided in this act for the single piece, and, when reduced in weight, below said standard and tolerance, shall be a legal tender at valuation in proportion to their actual weight; and any gold coin of the United States, if reduced in weight by natural abrasion not more than one-half of one per

centum below the standard weight prescribed by law, after a circulation of twenty years, as shown by its date of coinage, and at a ratable proportion for any period less than twenty years, shall be received at their nominal value by the United States Treasury and its offices, under such regulations as the Secretary of the Treasury may prescribe for the protection of the Government against fraudulent abrasion or other practices; and any gold coins in the Treasury of the United States reduced in weight below this limit of abrasion shall be recoined.

SEC. 15. That the silver coins of the United States shall be a trade-dollar, a half-dollar, or fifty-cent piece; a quarter-dollar, or twenty-five-cent piece; a dime, or ten-cent piece; and the weight of the trade-dollar shall be four hundred and twenty grains troy; the weight of the half-dollar shall be twelve grams (grammes) and one-half of a gram (gramme); the quarter-dollar and the dime shall be respectively, one-half and one-fifth of the weight of said half-dollar; and said coins shall be a legal tender at their nominal value for any amount not exceeding five dollars in any one payment.

SEC. 16. That the minor coins of the United States shall be a five-cent piece, a three-cent piece, and a one-cent piece, and the alloy for the five and three-cent pieces shall be of copper and nickel, to be composed of three-fourths copper and one-fourth nickel, and the alloy of the one-cent piece shall be ninety-five per centum of copper and five per centum of tin and zinc, in such proportions as shall be determined by the Director of the Mint. The weight of the piece of five cents shall be seventy-seven and sixteen-hundredths grains, troy; of the three-cent piece, thirty grains; and of the one-cent piece, forty-eight grains; which coins shall be a legal tender, at their nominal value, for any amount not exceeding twenty-five cents in any one payment.

SEC. 17. That no coins, either of gold, silver, or minor coinage, shall hereafter be issued from the Mint other than those of the denominations, standards, and weights herein set forth.

SEC. 18. That upon the coins of the United States there shall be the following devices and legends: Upon one side there shall be an impression emblematic of liberty, with an inscription of the word "Liberty" and the year of the coinage, and upon the reverse shall be the figure or representation of an eagle, with the inscriptions "United States of America" and "E Pluribus Unum," and a designation of the value of the coin; but on the gold dollar and three-dollar piece, the dime, five, three, and one-cent piece the figure of the eagle shall be omitted; and on the reverse of the silver trade-dollar the weight and the fineness of the coin shall be inscribed; and the Director of the Mint, with the approval of the Secretary of the Treasury, may cause the motto "In God we trust" to be inscribed upon such coins as shall admit of such motto; and any one of the foregoing inscriptions may be on the rim of the gold and silver coins.

SEC. 19. That at the option of the owner gold or silver may be cast into bars of fine metal, or of standard fineness, or unparted, as he may prefer, with a stamp upon the same designating the weight and fineness, and with such devices impressed thereon as may be deemed expedient to prevent fraudulent imitation, and no such bars shall be issued of a less weight than five ounces.

SEC. 20. That any owner of gold bullion may deposit the same at any mint, to be formed into coin or bars for his benefit; but it shall be lawful to refuse any deposit of less value than one hundred dollars; or any bullion so base as to be unsuitable for the operations of the mint; and when gold and silver are combined, if either metal be in such small proportion that it can not be separated advantageously, no allowance shall be made to the depositor for its value.

SEC. 21. That any owner of silver bullion may deposit the same at any mint, to be formed into bars, or into dollars of the weight of four hundred and twenty grains, troy, designated in this act as trade-dollars, and no deposit of silver for other coinage shall be received; but silver bullion contained in gold deposits, and separated therefrom, may be paid for in silver coin, at such valuation as may be, from time to time, established by the Director of the Mint.

SEC. 22. That when bullion is deposited in any of the mints, it shall be weighed by the superintendent, and, when practicable, in the presence of the depositor, to whom a receipt shall be given, which shall state the description and weight of the bullion; but when the bullion is in such a state as to require melting, or the removal of base metals, before its value can be ascertained, the weight, after such operation, shall be considered as the true weight of the bullion deposited. The fitness of the bullion to be received shall be determined by the assayer, and the mode of melting by the melter and refiner.

SEC. 23. That from every parcel of bullion deposited for coinage or bars, the superintendent shall deliver to the assayer a sufficient portion for the purpose of being assayed, but all such bullion remaining from the operations of the assay shall be returned to the superintendent by the assayer.

SEC. 24. That the assayer shall report to the superintendent the quality or fineness

of the bullion assayed by him, and such information as will enable him to compute the amount of the charges hereinafter provided for, to be made to the depositor.

SEC. 25. That the charge for converting standard gold bullion into coin shall be one-fifth of one per centum; and the charges for converting standard silver into trade-dollars, for melting and refining when bullion is below standard, for toughening when metals are contained in it which render it unfit for coinage, for copper used for alloy when the bullion is above standard, for separating the gold and silver when these metals exist together in the bullion, and for the preparation of bars, shall be fixed, from time to time, by the Director, with the concurrence of the Secretary of the Treasury, so as to equal but not exceed, in their judgment, the actual average cost to each mint and assay office of the material, labor, wastage, and use of machinery employed in each of the cases aforementioned.

SEC. 26. That the assayer shall verify all calculations made by the superintendent of the value of deposits, and, if satisfied of the correctness thereof, shall countersign the certificate required to be given by the superintendent to the depositor.

SEC. 27. That in order to procure bullion for the silver coinage authorized by this act, the superintendents, with the approval of the Director of the Mint, as to price, terms, and quantity, shall purchase such bullion with the bullion-fund. The gain arising from the coinage of such silver bullion into coin of a nominal value exceeding the cost thereof shall be credited to a special fund denominated the silver-profit fund. This fund shall be charged with the wastage incurred in the silver coinage, and with the expense of distributing said coins as hereinafter provided. The balance to the credit of this fund shall be from time to time, and at least twice a year, paid into the Treasury of the United States.

SEC. 28. That silver coins other than the trade-dollar shall be paid out at the several mints, and at the assay-office in New York City, in exchange for gold coins at par, in sums not less than one hundred dollars; and it shall be lawful, also, to transmit parcels of the same, from time to time, to the assistant treasurers, depositaries, and other officers of the United States, under general regulations proposed by the Director of the Mint, and approved by the Secretary of the Treasury; but nothing herein contained shall prevent the payment of silver coins, at their nominal value, for silver parted from gold, as provided in this act, or for change less than one dollar in settlement for gold deposits: *Provided*, That for two years after the passage of this act, silver coins shall be paid at the mint in Philadelphia and the assay-office in New York City, for silver bullion purchased for coinage, under such regulations as may be prescribed by the Director of the Mint, and approved by the Secretary of the Treasury.

SEC. 29. That for the purchase of metal for the minor coinage authorized by this act, a sum not exceeding fifty thousand dollars in lawful money of the United States shall be transferred by the Secretary of the Treasury to the credit of the superintendent of the mint at Philadelphia, at which establishment only, until otherwise provided by law, such coinage shall be carried on. The superintendent, with the approval of the Director of the Mint as to price, terms, and quantity, shall purchase the metal required for such coinage by public advertisement, and the lowest and best bid shall be accepted, the fineness of the metals to be determined on the mint assay. The gain arising from the coinage of such metals into coin of a nominal value, exceeding the cost thereof, shall be credited to the special fund denominated the minor-coinage profit fund; and this fund shall be charged with the wastage incurred in such coinage, and with the cost of distributing said coins as hereinafter provided. The balance remaining to the credit of this fund, and any balance of profits accrued from minor coinage, under former acts, shall be, from time to time, and at least twice a year, covered into the Treasury of the United States.

SEC. 30. That the minor coins authorized by this act may, at the discretion of the Director of the Mint, be delivered in any of the principal cities and towns of the United States, at the cost of the Mint, for transportation, and shall be exchangeable at par at the mint in Philadelphia, at the discretion of the superintendent, for any other coins of copper, bronze, or copper-nickel heretofore authorized by law; and it shall be lawful for the Treasurer and the several assistant treasurers and depositaries of the United States to redeem, in lawful money, under such rules as may be prescribed by the Secretary of the Treasury, all copper, bronze, and copper-nickel coins authorized by law when presented in sums of not less than twenty dollars; and whenever, under this authority, these coins are presented for redemption in such quantity as to show the amount outstanding to be redundant, the Secretary of the Treasury is authorized and required to direct that such coinage shall cease until otherwise ordered by him.

SEC. 31. That parcels of bullion shall be, from time to time, transferred by the superintendent to the melter and refiner; a careful record of these transfers, noting the weight and character of the bullion, shall be kept, and vouchers shall be taken for the delivery of the same, duly receipted by the melter and refiner, and the bullion thus placed in the hands of the melter and refiner shall be subjected to the

several processes which may be necessary to form it into ingots of the legal standard, and of a quality suitable for coinage.

SEC. 32. That the ingots so prepared shall be assayed, and if they prove to be within the limits allowed for deviation from the standard, the assayer shall certify the fact to the superintendent, who shall thereupon receipt for the same, and transfer them to the coiner.

SEC. 33. That no ingots shall be used for coinage which differ from the legal standard more than the following proportions, namely: In gold ingots, one thousandth; in silver ingots, three thousandths; in minor-coinage alloys, twenty-five thousandths, in the proportion of nickel.

SEC. 34. That the melter and refiner shall prepare all bars required for the payment of deposits; but the fineness thereof shall be ascertained and stamped thereon by the assayer; and the melter and refiner shall deliver such bars to the superintendent, who shall receipt for the same.

SEC. 35. That the superintendent shall, from time to time, deliver to the coiner ingots for the purpose of coinage; a careful record of these transfers, noting the weight and character of the bullion, shall be kept, and vouchers shall be taken for the delivery of the same, duly receipted by the coiner; and the ingots thus placed in the hands of the coiner shall be subjected to the several processes necessary to make from them coins in all respects conformable to law.

SEC. 36. That in adjusting the weights of the gold coins, the following deviations shall not be exceeded in any single piece: In the double-eagle and the eagle, one-half of a grain; in the half-eagle, the three-dollar piece, the quarter-eagle, and the one-dollar piece, one-fourth of a grain. And in weighing a number of pieces together, when delivered by the coiner to the superintendent, and by the superintendent to the depositor, the deviation from the standard weight shall not exceed one-hundredth of an ounce in five thousand dollars in double-eagles, eagles, half-eagles, or quarter-eagles, in one thousand three-dollar pieces, and in one thousand one-dollar pieces.

SEC. 37. That in adjusting the weight of the silver coins the following deviations shall not be exceeded in any single piece: In the dollar, the half and quarter dollar, and in the dime, one and one-half grains; and in weighing large numbers of pieces together, when delivered by the coiner to the superintendent, and by the superintendent to the depositor, the deviations from the standard weight shall not exceed two-hundredths of an ounce in one thousand dollars, half-dollars, or quarter dollars, and one-hundredth of an ounce in one thousand dimes.

SEC. 38. That in adjusting the weight of the minor coins provided by this act, there shall be no greater deviation allowed than three grains for the five-cent piece and two grains for the three and one cent pieces.

SEC. 39. That the coiner shall, from time to time, as coins are prepared, deliver them to the superintendent, who shall receipt for the same, and who shall keep a careful record of their kind, number, and actual weight; and in receiving coins it shall be the duty of the superintendent to ascertain, by the trial of a number of single pieces separately, whether the coins of that delivery are within the legal limits of the standard weight; and if his trials for this purpose shall not prove satisfactory, he shall cause all the coins of such delivery to be weighed separately, and such as are not of legal weight shall be defaced and delivered to the melter and refiner as standard bullion, to be again formed into ingots and recoined; or the whole delivery may, if more convenient, be remelted.

SEC. 40. That at every delivery of coins made by the coiner to a superintendent, it shall be the duty of such superintendent, in the presence of the assayer, to take indiscriminately a certain number of pieces of each variety for the annual trial of coins, the number for gold coins being not less than one piece for each one thousand pieces or any fractional part of one thousand pieces delivered; and for silver coins one piece for each two thousand pieces or any fractional part of two thousand pieces delivered. The pieces so taken shall be carefully sealed up in an envelope, properly labeled, stating the date of the delivery, the number and denomination of the pieces inclosed, and the amount of the delivery from which they were taken. These sealed parcels containing the reserved pieces shall be deposited in a pyx, designated for the purpose at each mint, which shall be kept under the joint care of the superintendent and assayer, and be so secured that neither can have access to its contents without the presence of the other, and the reserved pieces in their sealed envelopes from the coinage of each mint shall be transmitted quarterly to the mint at Philadelphia. A record shall also be kept at the same time of the number and denomination of the pieces so taken for the annual trial of coins, and of the number and denomination of the pieces represented by them and so delivered, a copy of which record shall be transmitted quarterly to the Director of the Mint. Other pieces may, at any time, be taken for such tests as the Director of the Mint shall prescribe.

SEC. 41. That the coiner shall, from time to time, deliver to the superintendent the clippings and other portions of bullion remaining after the process of coining; and the superintendent shall receipt for the same and keep a careful record of their weight and character.

SEC. 42. That the superintendent shall debit the coiner with the amount in weight of standard metal of all the bullion placed in his hands, and credit him with the amount in weight of all the coins, clippings, and other bullion returned by him to the superintendent. Once at least in every year, and at such time as the Director of the Mint shall appoint, there shall be an accurate and full settlement of the accounts of the coiner, and the melter and refiner, at which time the said officers shall deliver up to the superintendent all the coins, clippings, and other bullion in their possession, respectively, accompanied by statements of all the bullion delivered to them since the last annual settlement, and all the bullion returned by them during the same period, including the amount returned for the purpose of settlement.

SEC. 43. That when all the coins, clippings, and other bullion have been delivered to the superintendent, it shall be his duty to examine the accounts and statements rendered by the coiner and the melter and refiner, and the difference between the amount charged and credited to each officer shall be allowed as necessary wastage, if the superintendent shall be satisfied that there has been a bona-fide waste of the precious metals, and if the amount shall not exceed, in the case of the melter and refiner, one thousandth of the whole amount of gold, and one and one-half thousandth of the whole amount of silver delivered to him since the last annual settlement, and in the case of the coiner, one thousandth of the whole amount of silver, and one-half thousandth of the whole amount of gold that has been delivered to him by the superintendent; and all copper used in the alloy of gold and silver bullion shall be separately charged to the melter and refiner, and accounted for by him.

SEC. 44. That it shall also be the duty of the superintendent to forward a correct statement of his balance-sheet, at the close of such settlement, to the Director of the Mint, who shall compare the total amount of gold and silver bullion and coin on hand with the total liabilities of the mint. At the same time a statement of the ordinary expense account, and the moneys therein, shall also be made by the superintendent.

SEC. 45. That when the coins or bars which are the equivalent to any deposit of bullion are ready for delivery, they shall be paid to the depositor, or his order, by the superintendent; and the payments shall be made, if demanded, in the order in which the bullion shall have been brought to the mint; but in cases where there is delay in manipulating a refractory deposit, or for any other unavoidable cause, the payment of subsequent deposits, the value of which is known, shall not be delayed thereby; and in the denominations of coin delivered, the superintendent shall comply with the wishes of the depositor, except when impracticable or inconvenient to do so.

SEC. 46. That unparted bullion may be exchanged at any of the mints for fine bars, on such terms and conditions as may be prescribed by the Director of the Mint, with the approval of the Secretary of the Treasury; and the fineness, weight, and value of the bullion received and given in exchange shall in all cases be determined by the mint assay. The charge to the depositor for refining or parting shall not exceed that allowed and deducted for the same operation in the exchange of unrefined for refined bullion.

SEC. 47. That for the purpose of enabling the mints and the assay-office in New York to make returns to depositors with as little delay as possible, it shall be the duty of the Secretary of the Treasury to keep in the said mints and assay-office, when the state of the Treasury will admit thereof, such an amount of public money, or bullion procured for the purpose, as he shall judge convenient and necessary, out of which those who bring bullion to the said mints and assay-office may be paid the value thereof, in coin or bars, as soon as practicable after the value has been ascertained; and on payment thereof being made, the bullion so deposited shall become the property of the United States; but the Secretary of the Treasury may at any time withdraw the fund, or any portion thereof.

SEC. 48. That to secure a due conformity in the gold and silver coins to their respective standards of fineness and weight, the judge of the district court of the United States for the eastern district of Pennsylvania, the Comptroller of the Currency, the assayer of the assay-office at New York, and such other persons as the President shall, from time to time, designate, shall meet as assay-commissioners, at the mint in Philadelphia, to examine and test, in the presence of the Director of the Mint, the fineness and weight of the coins reserved by the several mints for this purpose, on the second Wednesday in February, annually, and may continue their meetings by adjournment, if necessary; if a majority of the commissioners shall fail to attend at any time appointed for their meeting, the Director of the Mint shall call a meeting of the commissioners at such other time as he may deem convenient; and if it shall appear by such examination and test that these coins do not differ from the standard fineness and weight by a greater quantity than is allowed by law, the trial shall be considered and reported as satisfactory; but if any greater deviation from the legal standard or weight shall appear, this fact shall be certified to the President of the United States; and if, on a view of the circumstances of the case, he shall so decide, the officer or officers implicated in the error shall be thenceforward disqualified from holding their respective offices.

SEC. 49. That for the purpose of securing a due conformity in weight of the coins of the United States to the provisions of this act, the brass troy-pound weight procured by the minister of the United States at London, in the year eighteen hundred and twenty-seven, for the use of the mint, and now in the custody of the mint at Philadelphia, shall be the standard troy pound of the Mint of the United States, conformably to which the coinage thereof shall be regulated.

SEC. 50. That it shall be the duty of the Director of the Mint to procure for each mint and assay-office, to be kept safely thereat, a series of standard weights corresponding to the aforesaid troy pound, consisting of a one-pound weight and the requisite subdivisions and multiples thereof, from the hundredth part of a grain to twenty-five pounds; and the troy weights ordinarily employed in the transactions of such mints and assay-offices shall be regulated according to the above standards at least once in every year, under the inspection of the superintendent and assayer; and the accuracy of those used at the mint at Philadelphia shall be tested annually, in the presence of the assay-commissioners, at the time of the annual examination and test of coins.

SEC. 51. That the obverse working-dies at each mint shall, at the end of each calendar year, be defaced and destroyed by the coiner in the presence of the superintendent and assayer.

SEC. 52. That dies of a national character may be executed by the engraver, and national and other medals struck by the coiner of the mint at Philadelphia, under such regulations as the superintendent, with the approval of the Director of the Mint, may prescribe: *Provided*, That such work shall not interfere with the regular coinage operations, and that no private medal dies shall be prepared at said mint, or the machinery or apparatus thereof be used for that purpose.

SEC. 53. That the moneys arising from all charges and deductions on and from gold and silver bullion and the manufacture of medals, and from all other sources, except as hereinbefore provided, shall, from time to time, be covered into the Treasury of the United States, and no part of such deductions or medal charges, or profit on silver or minor coinage, shall be expended in salaries or wages; but all expenditures of the mints and assay-offices, not herein otherwise provided for, shall be paid from appropriations made by law on estimates furnished by the Secretary of the Treasury.

SEC. 54. That the officers of the United States assay-office at New York shall be a superintendent, an assayer, and a melter and refiner, who shall be appointed by the President, by and with the advice and consent of the Senate. The business of said assay-office shall be in all respects similar to that of the mints, except that bars only, and not coin, shall be manufactured therein; and no metals shall be purchased for minor coinage. All bullion intended by the depositor to be converted into coins of the United States, and silver bullion purchased for coinage, when assayed, parted, and refined, and its net value certified, shall be transferred to the mint at Philadelphia, under such directions as shall be made by the Secretary of the Treasury, at the expense of the contingent fund of the mint, and shall be there coined, and the proceeds returned to the assay-office. And the Secretary of the Treasury is hereby authorized to make the necessary arrangements for the adjustment of the accounts upon such transfers between the respective offices.

SEC. 55. That the duties of the superintendent, assayer, and melter and refiner of said office shall correspond to those of superintendents, assayers, and melters and refiners of mints; and all parts of this act relating to mints and their officers, the duties and responsibilities of such officers, and others employed therein, the oath to be taken, and the bonds and sureties to be given by them, (as far as the same may be applicable,) shall extend to the assay-office at New York, and to its officers, assistants, clerks, workmen, and others employed therein.

SEC. 56. That there shall be allowed to the officers of the assay-office at New York City the following salaries per annum: To the superintendent, four thousand five hundred dollars; to the assayer, and to the melter and refiner, each, three thousand dollars; and the salaries of assistants and clerks, and wages to workmen, and their manner of appointment, shall be determined and regulated as herein directed in regard to mints.

SEC. 57. That the business of the branch mint at Denver, while conducted as an assay-office, and of the assay-office at Boise City, Idaho, and all other assay-offices hereafter to be established, shall be confined to the receipt of gold and silver bullion, for melting and assaying, to be returned to the depositors of the same, in bars, with the weight and fineness stamped thereon; and the officers of assay-offices, when their services are necessary, shall consist of an assayer, who shall have charge thereof, and a melter, to be appointed by the President, by and with the advice and consent of the Senate; and the assayer may employ as many clerks, workmen, and laborers, under the direction of the Director of the Mint, as may be provided for by law. The salaries of said officers shall not exceed the sum of two thousand five hundred dollars to the assayer and melter, one thousand eight hundred dollars each to the clerks, and the workmen and laborers shall receive such wages as are customary, according to their respective stations and occupations.

SEC. 58. That each officer and clerk to be appointed at such assay-offices, before entering upon the execution of his office, shall take an oath or affirmation before some judge of the United States, or of the supreme court, as prescribed by the act of July second, eighteen hundred and sixty-two, and each become bound to the United States of America, with one or more sureties, to the satisfaction of the Director of the Mint or of one of the judges of the supreme court of the State or Territory in which the same may be located, and of the Secretary of the Treasury, conditioned for the faithful performance of the duties of their offices; and the said assayers shall discharge the duties of disbursing agents for the payment of the expenses of their respective assay-offices.

SEC. 59. That the general direction of the business of assay-offices of the United States shall be under the control and regulation of the Director of the Mint, subject to the approbation of the Secretary of the Treasury; and for that purpose it shall be the duty of the said Director to prescribe such regulations and to require such returns, periodically and occasionally, and to establish such charges for melting, parting, assaying, and stamping bullion as shall appear to him to be necessary for the purpose of carrying into effect the intention of this act.

SEC. 60. That all the provisions of this act for the regulation of the mints of the United States, and for the government of the officers and persons employed therein, and for the punishment of all offenses connected with the mints or coinage of the United States, shall be, and they are hereby declared to be, in full force in relation to the assay-offices, as far as the same may be applicable thereto.

SEC. 61. That if any person or persons shall falsely make, forge, or counterfeit, or cause or procure to be falsely made, forged, or counterfeited, or willingly aid or assist in falsely making, forging, or counterfeiting, any coin or bars in resemblance or similitude of the gold or silver coins or bars, which have been, or hereafter may be, coined or stamped at the mints and assay-offices of the United States, or in resemblance or similitude of any foreign gold or silver coin which by law is, or hereafter may be made, current in the United States, or are in actual use and circulation as money within the United States, or shall pass, utter, publish, or sell, or attempt to pass, utter, publish, or sell, or bring into the United States from any foreign place, or have in his possession, any such false, forged, or counterfeited coin or bars, knowing the same to be false, forged, or counterfeited, every person so offending shall be deemed guilty of felony, and shall, on conviction thereof, be punished by fine not exceeding five thousand dollars, and by imprisonment and confinement at hard labor not exceeding ten years, according to the aggravation of the offense.

SEC. 62. That if any person or persons shall falsely make, forge, or counterfeit, or cause or procure to be falsely made, forged, or counterfeited, or willingly aid or assist in falsely making, forging, or counterfeiting any coin in the resemblance or similitude of any of the minor coinage which has been, or hereafter may be, coined at the mints of the United States; or shall pass, utter, publish, or sell, or bring into the United States from any foreign place, or have in his possession, any such false, forged, or counterfeited coin, with intent to defraud any body politic or corporation, or any person or persons whatsoever, every person so offending shall be deemed guilty of felony, and shall, on conviction thereof, be punished by a fine not exceeding one thousand dollars, and by imprisonment and confinement at hard labor not exceeding three years.

SEC. 63. That if any person shall fraudulently, by any art, way, or means whatsoever, deface, mutilate, impair, diminish, falsify, scale, or lighten the gold or silver coins which have been, or which shall hereafter be, coined at the mints of the United States, or any foreign gold or silver coins which are by law made current, or are in actual use and circulation as money within the United States, every person so offending shall be deemed guilty of a high misdemeanor, and shall be imprisoned not exceeding two years, and fined not exceeding two thousand dollars.

SEC. 64. That if any of the gold or silver coins which shall be struck or coined at any of the mints of the United States shall be debased, or made worse as to the proportion of fine gold or fine silver therein contained; or shall be of less weight or value than the same ought to be pursuant to the several acts relative thereto; or if any of the weights used at any of the mints or assay-offices of the United States shall be defaced, increased, or diminished through the fault or connivance of any of the officers or persons who shall be employed at the said mints or assay-offices, with a fraudulent intent; and if any of the said officers or persons shall embezzle any of the metals which shall at any time be committed to their charge for the purpose of being coined, or any of the coins which shall be struck or coined at the said mints, or any medals, coins, or other moneys of said mints or assay-offices at any time committed to their charge, or of which they may have assumed the charge, every such officer or person who shall commit any or either of the said offenses shall be deemed guilty of felony, and shall be imprisoned at hard labor for a term not less than one year nor more than ten years, and shall be fined in a sum not exceeding ten thousand dollars.

SEC. 65. That this act shall take effect on the first day of April, eighteen hundred and seventy-three, when the offices of the treasurers of the mints in Philadelphia, San Francisco, and New Orleans shall be vacated, and the assistant treasurer at New York shall cease to perform the duties of treasurer of the assay-office. The other officers and employés of the mints and assay-offices now appointed shall continue to hold their respective offices, they having first given the necessary bonds, until further appointments may be required, the director of the mint at Philadelphia being styled and acting as superintendent thereof. The duties of the treasurers shall devolve as herein provided upon the superintendents, and said treasurers shall act only as assistant treasurers of the United States: *Provided*, That the salaries heretofore paid to the treasurers of the mints at Philadelphia, San Francisco, and New Orleans, acting as assistant treasurers, shall hereafter be paid to them as "assistant treasurers of the United States," and that the salary of the assistant treasurer at New York shall not be diminished by the vacation of his office as treasurer of the assay-office.

SEC. 66. That the different mints and assay-offices authorized by this act shall be known as "the mint of the United States at Philadelphia," "the mint of the United States at San Francisco," "the mint of the United States at Carson," "the mint of the United States at Denver," "the United States assay-office at New York," "the United States assay-office at Boise City, Idaho," "the United States assay-office at Charlotte, North Carolina;" and all unexpended appropriations heretofore authorized by law for the use of the Mint of the United States at Philadelphia, the branch-mint of the United States in California, the branch-mint of the United States at Denver, the United States assay-office in New York, the United States assay-office at Charlotte, North Carolina, and the United States assay-office at Boise City, Idaho, are hereby authorized to be transferred for the account and use of the institutions established and located respectively at the places designated by this act.

SEC. 67. That this act shall be known as the "Coinage act of eighteen hundred and seventy-three;" and all other acts and parts of acts pertaining to the mints, assay-offices, and coinage of the United States inconsistent with the provisions of this act are hereby repealed: *Provided*, That this act shall not be construed to affect any act done, right accrued, or penalty incurred, under former acts, but every such right is hereby saved; and all suits and prosecutions for acts already done in violation of any former act or acts of Congress relating to the subjects embraced in this act may be begun or proceeded with in like manner as if this act had not been passed; and all penal clauses and provisions in existing laws relating to the subjects embraced in this act shall be deemed applicable thereto: *And provided further*, That so much of the first section of "An act making appropriations for sundry civil expenses of the Government for the year ending June thirty, eighteen hundred and seventy-one, and for other purposes," approved July fifteen, eighteen hundred and seventy, as provides that until after the completion and occupation of the branch-mint building in San Francisco, it shall be lawful to exchange, at any mint or branch-mint of the United States, unrefined or unparted bullion, whenever, in the opinion of the Secretary of the Treasury, it can be done with advantage to the Government, is hereby repealed.

Approved, February 12, 1873.

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