

# The First Motto on United States Coins

## “Liberty—Parent of Science and Industry”

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**R**EACH INTO YOUR POCKET or purse and take out a coin. Take a moment to study it. Like every other artifact, coins reveal interesting things about the culture that made them. One story that U.S. coins tell is the increasing importance of the President. From the time that the United States minted its first coins at the end of the 18th century until the beginning of the 20th century, every one of its coins featured either an abstract female or a Native American. Faces of dead U.S. Presidents began to appear in 1909, on the 100th anniversary of President Lincoln's birth. Lincoln was joined in 1932 by Washington on the quarter, Jefferson in 1939 on the nickel, Roosevelt in 1946 on the dime, and Kennedy in 1964 on the half dollar.

Faces on coins tell stories—as do words, especially in mottoes. A motto is a short sentence or phrase that encapsulates key beliefs or ideals guiding an individual, family, or institution, in this case the

United States of America. On a modern U.S. coin you will see three mottoes: “Liberty,” “In God We Trust,” and “E Pluribus Unum” (Figure 1). The first two are on the front (obverse or “heads”), the last is on the back (reverse or “tails”). Each of these messages encapsulates a core belief or ideal of our nation. Where did they come from? Which was first adopted for coins and when? And are these the original slogans of U.S. coins? “In God We Trust” is the most recently added of the three slogans, first appearing on a U.S. two-cent piece in 1864. “E Pluribus Unum” is the oldest motto. This motto first appeared on the Great Seal of the United States, first made in 1776 and first appeared on U.S. coins in 1795 on the Half Eagle (5-dollar gold piece). “Liberty” is the oldest motto. It appears on the first coins that the U.S. Mint in Philadelphia made in 1793. But experimental coins were struck by the U.S. government in 1792 and a different motto is on these coins. Thereby hangs a tale. . . .

In February 1789 George Washington was elected the first President of the United States. The government of the new nation tested its wobbly legs as it warily watched events across the Atlantic. The cause of representative democracy at first appeared to advance in Europe, especially in France. Thomas Jefferson witnessed early developments leading to the French Revolution as U.S. Minister to France from May 1785 to Sept. 1789. One of his last acts there was to help write the 17 articles of the Declaration of the Rights of Man and of the Citizen. Unrest continued and in June 1791, King Louis XVI and his family fled Paris dressed as servants, only to be captured and returned to Paris. In August 1791, Austria and Prussia declared war on revolutionary France. The Reign of Terror would not begin until June 1793, but the conservative reaction against democracy was strengthening. In these uncertain times, the fledgling United States wanted above all else to appear as strong and as united as possible. A steady hand was needed, and President George Washington fit the bill perfectly. By 1791 Washington was ably assisted by Vice President John Adams, Secretary of State Thomas Jefferson, Secretary of the Treasury Alexander Hamilton, Secretary of War Henry Knox, and Attorney General Edmund Randolph.

Up to this point in their lives, Jefferson and Hamilton had experienced little but admiration from their colleagues. This changed when they met in Washington's Cabinet, where each discovered in the other an implacable antagonist. The two men couldn't have been more different in background and personality. Hamilton was an orphan, an immigrant, and a self-made man who was loud and proud of his accomplishments. Jefferson was the son of a plantation owner, and inherited an estate of 5,000 acres and 52 slaves at the age of 21, and gained still more land and slaves through

marriage. Jefferson hated confrontation; Hamilton thrived on it. Hamilton lived in New York City and Jefferson in rural Virginia. They also differed in their perspectives: "...Hamilton was the head (brains), and Jefferson was the heart..." of the new nation."<sup>1</sup> That may have been true, but head and heart didn't like each other much. The clash of Hamilton and Jefferson is captured in Lin Manuel Miranda's 2015 smash musical "Hamilton," first from Jefferson's perspective in the song "What did I Miss?," then as they clash in "Cabinet Battle #1," "Cabinet Battle #2," and "Cabinet Battle #3. These four songs are well worth googling and watching to grasp the Jefferson-Hamilton battle of minds and wills.

It is no wonder that their disagreements about the direction that the new nation should take soon became personal. For example, Hamilton took Jefferson's opposition to his proposed "Bank of the United States" as a personal insult. "Mr. Jefferson," he wrote, "not only delivered an opinion in writing against its constitutionality and expediency, but he did it in a style and manner which I felt as partaking of asperity and ill-humor toward me."<sup>2</sup>

Regardless of the tensions between the two *wunderkinder* Jefferson and Hamilton (who were 49 and mid-30's in 1792, respectively), the new nation had to deal quickly with two related problems: its debts and its economy. Financial chaos persisted, largely because each of the thirteen states had accumulated huge debts during the Revolutionary War. There was runaway inflation. Almost all areas of the U.S. economy were weak throughout the 1780s. Economic hard times were a

1 Charles Rufus Skinner, *Manual Of Patriotism: For Use in the Public Schools of the State of New York* (Albany, N.Y.: State Superintendent of Public Instruction, 1900), p. 261.

2 Parton, James. "The Quarrel of Jefferson and Hamilton," *The Atlantic* (March 1873), online at [www.theatlantic.com/magazine/archive/1873/03/the-quarrel-of-jefferson-and-hamilton/537411/](http://www.theatlantic.com/magazine/archive/1873/03/the-quarrel-of-jefferson-and-hamilton/537411/)

major factor in the crisis that motivated a stronger federal government under the new U.S. Constitution, ratified in December 1787. Compounding the economic crisis was the fact that coins of many countries were used for buying and selling in the former colonies: English, Spanish, and French. The Spanish eight-real piece—the forerunner of the U.S. silver dollar—was especially popular (Figure 2A). English speakers in the colonies began to apply the word “dollar” (after the German word “taler”) to the Spanish peso or “piece of eight,” which was what the eight-real piece was called at the time of the American Revolution.

Jefferson and Hamilton disagreed about many aspects of Federal economic policy but agreed that the new nation needed its own money, and that money needed to be taken seriously by the Europeans. The Spanish, British, and French all had “serious money,” hefty coins of silver and gold (Figure 2). Paper currency was issued by the Continental Congress during the revolutionary war but this “continental currency” lost nearly all of its value so that by 1780 the bills were worth one-fortieth of their value, leading to the phrase “not worth a continental.” More valued were the copper, silver, and gold coins of other nations (Figure 2).



Figure 1

The Walking Liberty silver U.S. 50-cent coin, issued from 1916 to 1947. The coin was designed by sculptor and engraver Adolf Weinman. The design features a woman draped in a U.S. flag as she strides in sandals confidently toward what must be the rising sun. She wears a liberty cap (also known as a phrygian cap or *bonnet rouge*) and carries branches of laurel and oak, symbols of civil and military glory. Her right hand stretches out towards something in front of her that we cannot see. Is it the future? Is she greeting someone? Is she showing us something? The reverse of the half dollar shows an eagle perched on a mountain crag, his massive wings stretched in display, fearless in spirit and conscious of his power (Compare this eagle with his undernourished relative in Figure 3). Springing from the rock is a pine sapling, symbolic of America. Art historian Cornelius Vermeule praised the Walking Liberty half dollar for integrating the obverse and reverse as a surface sculptural ensemble, characterizing it as “one of the greatest coins of the United States—if not of the world.” (in Vermeule, *Numismatic Art in America: Aesthetics of the United States Coinage* [Belknap Press, 1971], p. 141). Note the mottoes “Liberty” and “In God We Trust” on the obverse, “E Pluribus Unum” on the reverse (1.2 inches diameter, 0.44 ounces of 90% silver). Image courtesy of Heritage Auctions, Dallas.





A. *Spanish 8 Reals* (28g/1 oz. silver)

3.8 centimeters (1.5 inches)



B. *British Guinea* (8.5g/0.3 oz. gold)

2.4 centimeters (0.95 inches)



C. *French Ecu* (28g/1 oz. silver)

3.9 centimeters (1.55 inches)

Figure 2

The dominant coins of European powers in 1792:

- A. Spanish silver 8 real piece from 1792. Note the traditional obverse of the reigning monarch and reverse of his coat-of-arms. This coin is about the size and silver content of the US silver dollar (The first US silver dollar was minted in 1794).
  - B. British one guinea gold coin from 1792. Worth one pound and one shilling.
  - C. French ecu. Minted during the French Revolution before Louis XVI was overthrown. Obverse: LOUIS XVI ROI DES FRANCOIS, "Louis XVI King of France," Reverse: Winged genius of France inscribing the constitution on a tablet. REGNE DE LA LOI "Rule of the Law" AN 4 DE LA LIBERTE "Year 4 of Liberty."
- Images courtesy of Heritage Auctions, Dallas.

In 1790, Secretary of State Jefferson was asked by Congress to comment on a proposal by an individual to make coins for the new nation. Jefferson argued against it, proposing instead that the U.S. should construct a mint where it could make its own coins. Congress then asked Treasury Secretary Hamilton for his opinion regarding establishment of a U.S. mint. Hamilton's report of January 1791 proposed the silver dollar as the basic unit of money, the implementation of a decimal system, and placing the United States on a bimetallic standard using both gold and silver, with copper reserved for pennies and half-pennies.<sup>3</sup>

On April 2, 1792, Congress passed the Coinage Act, establishing the dollar as the national currency, and stipulating that it was to have the value of a Spanish eight-real piece. In contrast to the Spanish dollar, which was subdivided into eighths or "pieces of eight," Congress chose a decimal system (which was unusual for the time) and called for the minting of the half cent, cent, half disme (five cents), disme (ten cents), quarter dollar, half dollar, and dollar, as well as gold coins of higher value, called "Eagles." The Act called for establishing a U.S. national mint in what was then the capital in Philadelphia. Opened in Sept. 1792, the Mint was the first

government building constructed by the fledgling republic. Curiously, Washington placed the new Mint under the jurisdiction of the State Department (Jefferson), not the Treasury Department (Hamilton).<sup>4</sup> Whatever discussions were held about whether Hamilton or Jefferson should be put in charge were not recorded, to my knowledge. Jon Meacham's recent biography of Jefferson doesn't mention the mint or Jefferson's role in it.

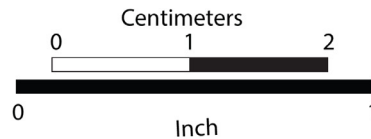
The first coins minted were two experiments with silver and copper. First was the 1792 silver half disme (pronounced "deem"); 1500 of these were struck in the cellar of a nearby building while the Mint was being constructed. These were 17.5 millimeters (2/3 inch) in diameter and weighed 1.3 grams (Figure 3b). That same year, experimental one-cent coins were also struck; these were much larger (28.6 millimeters) and heavier (17 grams) copper pieces. Instead of featuring the faces of old kings, the coins showed the profile of a young woman, her long hair freely flowing, her eyes wide open and looking forward; is that a smile on her lips? (Figure 3A) Around her were written around the rim the first U.S. coin motto: "Liberty: Parent of Science & Industry." This motto could easily fit around the rim of the large cent piece but had to be abbreviated to "Lib. Par. Of Science & Industry" on the half disme. The reverse of

3 Final Version of the Report on the Establishment of a Mint, [28 January 1791]. Original Reports of the Secretary of the Treasury, 1790–1791, National Archives, online at [founders.archives.gov/documents/Hamilton/01-07-02-0334-0004](https://founders.archives.gov/documents/Hamilton/01-07-02-0334-0004).

4 Ron Chernow, *Alexander Hamilton*. London: Penguin, 2004.



A. Penny (17.1g/0.6 oz. copper)



B. Half Disme (1.3g/0.046 oz. silver)

Figure 3 The 1792 US coins, one cent copper and five-cent silver piece (half-disme). The half disme has around the obverse rim "Lib Par of Science & Industry." Image courtesy of Heritage Auctions, Dallas.

the penny features a laurel wreath, whereas the reverse of the half-disme features a rather pathetic-looking eagle. Maybe this bird accurately captured the economic realities of the new nation? A century later, the eagle on U.S. coins would appear much healthier, reaching its peak of health on the reverse of the "Walking Liberty" half dollar (Figure 1).

The motto "Liberty: Parent of Science & Industry" was fleeting. In 1793, when the first official U.S. coins were struck in the new mint, the motto had disappeared. It was replaced by the simple phrase "Liberty," the motto that appears on U.S. coins to this day.

Where did the short-lived motto "Liberty: Parent of Science & Industry" come from, and why did it disappear? There are no documents that explain its origins. Because Jefferson supervised Mint operations, he must have chosen, or at least approved of the phrase, on the experimental 1792 coins. It is puzzling that this exact phrase is unknown from his writings or those of any of the other founding fathers. The phrase is identical—except for one word—to an earlier phrase of his. Jefferson in 1789 wrote a letter to Joseph Willard, President of Harvard, and used this phrase: "Liberty... is the great parent of science and



virtue. . . .” One can imagine that some of his colleagues would have pushed back against a platitude linking liberty and virtue, especially for the slaveholder Jefferson. Did Jefferson use this phrase in conversations? One can imagine Hamilton scoffing at the statement, if and when he heard it. Also, by 1792 Jefferson had begun to realize that liberty did not automatically lead to virtuous conduct in public affairs. He must have been alarmed by events in France, where their revolution was becoming increasingly bloody. Or maybe he was convinced by Hamilton’s arguments that the new republic needed a strong industrial base in order to survive, and that “industry” should replace “virtue” in the motto. We do not know. All we know is that the first motto on a U.S. coin was “Liberty: Parent of Science & Industry.”

The phrase was a blessing and a premonition. United States science and industry rose together all through the 19th and 20th centuries, leading to the invention of the telegraph, accelerated by the U.S. Civil War and the growth of the railroads; blossoming into electricity, the telephone, the internal combustion engine, the airplane, the film industry, the atomic bomb, the integrated circuit, and the personal computer; and culminating in the moon landing and exploration of the solar system. In the early 21st century, U.S. science and industry may be loosening its grip on global dominance, but we still attract many of the greatest young minds who want to come here to study and work. Jefferson and Hamilton in the early 1790s may have dreamt that their fledgling country would grow in scientific stature and industrial strength, but they never could have imagined the world of discovery and innovation that they helped bring into being. “Liberty: Parent of Science & Industry.” A truer prophecy was never struck on a coin. **A**

Thanks to Sam Spiegel and Mark Feld at Heritage Auctions, Dallas, for answering my questions. All coin photos are by permission of Heritage Auctions, Dallas.

## Further Reading

Jon Meacham, *Thomas Jefferson: The Art of Power*. New York: Random House, 2012.

*Numista*, [en.numista.com/index.php](http://en.numista.com/index.php).

*Hamilton*, the 2016 hit musical, includes several numbers: “What’d I Miss?” features Hamilton and Madison. “Cabinet Battle #1” is based on events in 1791 leading up to establishment of a United States national bank; “Cabinet Battle #2” is based on events after England declared war on Revolutionary France in 1793; and “Cabinet Battle #3” was the first cabinet battle between Jefferson and Hamilton, occurring soon after Benjamin Franklin petitioned Congress in Feb. 1790 to abolish slavery. It was one of Franklin’s last acts; he died in April 1790. *Hamilton: An American Musical*, music and lyrics by Lin-Manuel Miranda, dir. Thomas Kail, Richard Rodgers Theatre, New York, 2016.

III. *Report on Copper Coinage* [14 April 1790]. Transcript, Library of Congress, Thomas Jefferson Papers, 54: 9232-4, online at [founders.archives.gov/documents/Jefferson/01-16-02-0200-0004](http://founders.archives.gov/documents/Jefferson/01-16-02-0200-0004).

Wikipedia entries on “Alexander Hamilton,” “Early American Currency,” “E Pluribus Unum,” “George Washington,” “Guinea (coin),” “Spanish dollar,” “Thomas Jefferson,” and “Walking Liberty Half Dollar.”