

The Evolution of the Dollar Mark

Mathematics

FLORIAN CAJORI in *A History of Mathematical Notation* (Open Court):

The history of the dollar mark is difficult to trace. The vast majority of old documents give monetary names written out in full. This is the case also in printed books. Of nine Spanish commercial arithmetics of the seventeenth and eighteenth centuries, five gave no abbreviations whatever for the *peso* (also called *piastre*, *peso de 8 reales*, "piece of eight," "Spanish dollar"). In fact, some did not mention the peso at all. The reason for the omission of *peso* is that the part of Spain called Castile had monetary units called *reales*, *ducados*, *maravedises*, etc.; the word *peso* was used mainly in Spanish America and those towns of Spain that were in closest touch with the Spanish colonies. After the conquest of Mexico and Peru, early in the sixteenth century, Spanish-American mints, established in the various points in the Spanish possessions, poured forth the Spanish dollar in such profusion that it became a universal coin, reaching before the close of the century even the Philippines and China. In the seventeenth century the Spanish "piece of eight" was known in Virginia, and much was done to promote the influx of Spanish money into that colony. The United States dollar, adopted in 1785, was avowedly modeled on the average weight of the Spanish-dollar coins in circulation. Thomas Jefferson speaks of the dollar as "a known coin, and most familiar of all to the minds of the people." No United States dollars were actually coined before the year 1794. We proceed to unfold our data and to show the evolution of the dollar mark by stages so easy and natural that the conclusion is irresistible. There are no important "missing links." To enable the critical reader to verify our data, we give the sources of our evidence. No man's *ipse dixit* is a law in the world of scientific research.

We begin with information extracted from early Spanish printed books, consisting of abbreviations used for *peso* or *pesos*.

Ivan Vasquez de Serna.....	1620
<i>Pes., pes de 8 rela.</i>	
Francisco Cassany.....	1763
<i>p, also ps.</i>	
Benito Bails.....	1790
<i>pe, seldom p.</i>	
Manuel Antonio Valdes.....	1808
<i>ps.</i>	

Here we have the printed abbreviations *Pes.*, *ps*, *pe*, *p*. More interesting and convincing are the abbreviations found in manuscripts which record commercial transactions. We can give only a small part of the number actually seen. In our selection we are not discriminating against symbols which might suggest a conclusion different from our own. As a matter of fact, such discrimination would be difficult to make, for the reason that all the abbreviations for the *peso*, or "piece of eight," or *piastre* that we have examined point unmistakably to only one conclusion. We say this after having seen many hundreds of these symbols in manuscripts, antedating 1800, and written in Mexico, the Philippines, San Felipe de Puerto, New Orleans, and the colonies of the United States. It was a remarkable coincidence that all times the contraction of the word dollar was best known, namely, the *peso*, *piastre*, and "piece of eight," began with the letter *p* and all three were pluralized by the use of the letter *s*. Hence *p* and *ps* admirably answered as abbreviations of any of these names. The symbols in Figure III show that the usual abbreviations was *ps* or *p*, the letter *p* taking sometimes a florescent form and the *s* in *ps* being as a rule raised above the *p*. The *p* and the *s* are often connected, showing that they were written in these instances by one uninterrupted motion of the pen. . . . The capital *P* is a rare occurrence. We have seen it used at the beginning of sentences and a few times written in ledgers at the top of columns of figures. In the sixteenth century the *ps* had above it a mark indicating the omission of part of the word. Some-*ps*. Sometimes the contraction of the *pesos* was *pss.* or *pos.* Not infrequently two or more different abbreviations are found in one and the same manuscript. The body of the text may contain the word written out in full, or contracted to *pss* or *pos*, while the margin or the head of a column of figures may exhibit *ps* or simply *p*. These were the abbreviations used by the Spanish-Americans from the sixteenth century down to about 1820 or 1830. The transition from the *ps* to our modern dollar mark was not made by the Spaniards; it was made by the English-speaking people who came in contact with the Spaniards. At the time when Mexico achieved its independence (1821), the

\$ was not yet in vogue there. In a Mexican book of 1834 on statistics both the *ps* and the \$ are used. . . .

Mr. Augustus H. Fiske, of Cambridge, Massachusetts, has pointed out to the present writer that the modern dollar mark occurs in a diary of Ezra L'Hommedieu for the year 1776. L'Hommedieu was a native of Southold, Long Island, and a Yale graduate. He was a member of the New York Provincial Assembly, which, on July 10, 1776, styled itself the Convention of the Representatives of the State of New York. The first date in the diary is June 10, 1776; the last is December 5, 1776. Before August 21, 1776, most sums of money are expressed in pounds and shillings. When dollars are mentioned, the word "dollar" is written out in full. On August 21 occurs the first dollar symbol. Under date of August 28 the treasurer is to advance \$10 for removing military stores from New York. On October 2 a loan of \$100,000 is obtained from the Continental Congress, on October 3 and 4 the same sum is referred to in a similar way. On October 4 the treasurer is to pay \$6412 2-3 bounty money to the rangers. The \$ signs now appear more frequently. . . . We see in this diary the gradual substitution of the conventional sign \$ for the spelled word. . . .

The origin of the dollar mark is simplicity itself. It is an evolution from *ps*. When the *p* was made by one long stroke only, then the mark took the form \$, as used by Robert Morris. Before 1800 the regular mark \$ was seldom used. In all our researches we have encountered it in eighteenth-century manuscripts not more than thirty or forty times. None of these antedates L'Hommedieu's diary of 1776. But the dollar money was then very familiar. In 1778 theater prices in printed advertisements in Philadelphia ran, "Box, one dollar." An original manuscript document of 1780 gives thirty-four signatures of subscribers, headed by the signature of George Washington. The subscribers agree to pay the sum annexed to their respective names, "in the promotion of support of a dancing assembly to be held in Morristown this present winter. The sums are given in dollars, but not one of the signers used the \$ symbol; they wrote "Dollars," or "Doll," or "D."

Science News-Letter, May 25, 1929