Counterfeiters Find Ways to Deceive Collectors

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Counterfeiters employ various techniques and methods to create counterfeits, deceptive fakes and altered coins. These methods include the following:

- 1. Added and embossed mintmarks
- 2. Cast
- 3. Die struck
- 4. Electrotypes
- 5. Spark erosion
- 6. Plated
- 7. Altered dates and varieties

The counterfeiter seeking to produce the largest quantity of good quality, counterfeit coins would certainly choose to strike them using dies. Most of his time would be spent preparing the die, but once the die is finished the counterfeiter is free to make as many examples as he wants, each of reasonably good quality. However, this method also takes the most talent and is more costly to produce.



Large fraction - correct for an 1804, but this is an electrotype

Incomplete metal fill on electrotype

Incomplete metal fill on electrotype Raised lumps on Liberty's neck on electrotype

Since molds are cheaper than dies, cast copies are less expensive to produce. Other inexpensive ways of altering genuine coins include adding mintmarks, plating, or altering dates and varieties. The most common plated coin is the 1943 copper cent; however, it is very easy to detect with a magnet.

Adding a mintmark requires talent to correctly duplicate a genuine coin and knowing the proper sizes and shapes of mintmarks is the best way to detect these deceptive counterfeits.

There are three ways in which mintmarks can be added to a coin:

1. Fabricating a mintmark out of raw metal and adhering it to a genuine, common date coin. This method fools the average collector but not necessarily the specialist, unless the counterfeiter is quite experienced. It

is very difficult to fabricate the exact shape and size of original mintmarks. Pieces made by novices are detected easily.

- 2. Cutting a genuine mintmark off a common coin and soldering it onto another coin, thus turning a common issue into a rare one. If the counterfeiter uses the correct style of mintmark, this type of alteration can be very deceptive. A dead giveaway is a seam or improper metal flow where the mintmark joins the surface of the coin.
- 3. *Embossing a mintmark in the proper position.* This requires talent and unusual tools. The counterfeiter accomplishes his deception by drilling a small hole in the edge of the coin, inserting a small tool into the hole, and punching a mintmark from the inside of the coin outward. This leaves no seam around the mintmark, making it somewhat hard to detect. The hole on the edge is then filled in and smoothed off. One must look very closely at the edge of suspect coins to catch these deceptive counterfeits.



Example 2: 1804 Large Cent - Electrotype

Electrotypes

Wax impressions are made of both the obverse and reverse. The counterfeiter coats the impressions with an electrical conductor such as copper, then inserts the two impressions into an electrolytic solution. An electrical current causes copper to plate the impression, producing two shells of copper. The shells are removed, tooled down, filled with lead, and joined together. Finally, the edge is burnished to hide the seam.

Spark Erosion

In this method, an electrical discharge machine passes a series of electrical charges over the surface of a genuine coin. The spark jumps to an adjacent piece of metal (usually steel) and etches the metal in opposite relief. This resulting die is somewhat crude in that it usually exhibits granular surfaces with lumps and depressions. Many times, the counterfeiter polishes the dies to remove these defects, resulting in coins that have Prooflike surfaces. Often, the

edges of these coins have an unnatural, squared-off appearance.

As an example, we will examine the scarce 1804 large cent, illustrated here by two types of counterfeits.

The first example was altered from an original 1801 large cent. Even though the counterfeiter did a fairly good job of changing the 1 to a crosslet 4 (a genuine characteristic of all 1804 cents), his mistake was that the 1801 large cent came with a small fraction on the reverse. All 1804 large cents feature a large fraction. Another diagnostic of genuine 1804 large cents is the positioning of the 0 of the date opposite the O of "OF."

The second example is an electrotype that was copied from a genuine 1804 cent with broken dies, as evident from the die cuds on the obverse at 1:00 and on the reverse at 4:00. This counterfeit was formed from a corroded original coin, thus creating a somewhat rough-looking copy. However, the surfaces are too smooth for such a corroded coin. Faint evidence of a seam can be seen on the edge upon close examination.

This particular coin weighed in over 1.5 grams too light at 9.04 grams, and a noticeable false thud (created from lead core) could be heard instead of a natural ring tone. The coin has a depression below the ear as well as a few small raised pimples on Liberty's neck. Slight concavity of the hair on the obverse and of the leaves on the reverse is another sign that this coin is a counterfeit.

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