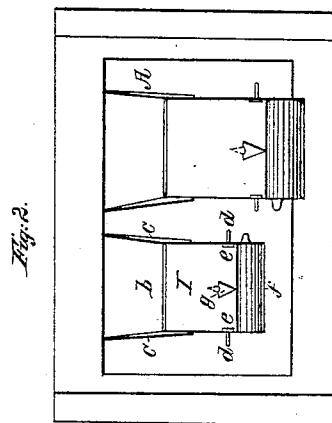
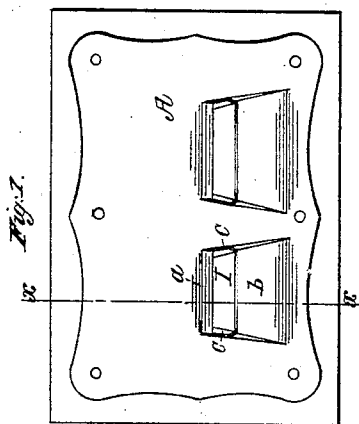
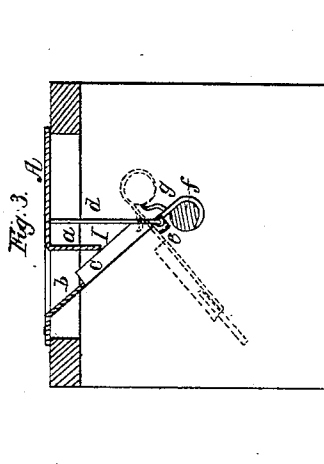


W. PAINTER.
Counterfeit Coin Detector.

No. 35,834.

Patented July 8, 1862.



Witnesses:

J. Brown
W. Reed

Inventor:
W. Painter
per *Munn & Co*
Attorneys

UNITED STATES PATENT OFFICE.

WILLIAM PAINTER, OF FALLSTON, MARYLAND.

IMPROVEMENT IN COUNTERFEIT-COIN DETECTORS.

Specification forming part of Letters Patent No. 35,834, dated July 8, 1862.

To all whom it may concern:

Be it known that I, WILLIAM PAINTER, of Fallston, in the county of Harford and State of Maryland, have invented a new and Improved Counterfeit-Coin Detector; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a plan or top view of my invention. Fig. 2 is an inverted plan of the same. Fig. 3 is a vertical section of the same, taken in the line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts in the several figures.

The object of this invention is to obtain a counterfeit-coin detector which will admit of being applied to a counter or table directly over a drawer or receptacle and serve as a means for conveying the genuine coin into the drawer, and at the same time serve as a means to detect spurious coin that may be placed into it for the purpose of being passed into the drawer, thereby avoiding any waste of time in testing coin, as is now the case in using the various detectors hitherto devised.

To this end the invention consists in the employment or use of one or more suspended or tilting spouts arranged with gages in such a manner that each piece of coin in its passage through the detector into the receptacle or drawer is weighed and gaged or measured, and any spurious piece, which of course cannot pass these tests, will be detected at once, as it cannot pass into the receptacle or drawer.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents a metal plate, which is screwed to the top of the counter or table directly over a receptacle or drawer. This plate is slotted or cut in the form of an *H*, and the metal, *a*, at the back part of the cut bent down to about a vertical position, the metal, *b*, at the front part of the cut being bent down so as to form an inclined plane at an angle of about forty-five degrees, as shown clearly in Fig. 3.

I is a spout, which may be formed of a plate of sheet metal bent upward at its sides, as shown at *c c* in Fig. 1. The spout *I* is suspended between two vertical rods, *d d*, which are secured to the under side of the plate *A*, and are bent

toward each other horizontally at their lower ends, and fitted in pendent ears *c c*, attached to the spout *I*. The spout *I* is allowed to work freely on the lower ends of the rods *d d*, and is loaded at its back end, as shown at *f*, so as to keep the upper edges of the sides *c c* in contact with the lower edge of *a* and the front edge of the spout in line with the inclined plane *b*, as shown clearly in Fig. 3. The weight *f* is designed to be a trifle lighter than a genuine coin to be tested, and the width of the spout *I*—that is to say, the space between the sides *c c*—is to be wider than the diameter of the coin, and the space between the bottom of spout *I* and the lower edge of *a* equal in height to the thickness of said coin. The spout *I* is provided with a stop or projection, *g*, at its lower part, and the distance between this stop and the lower edge of the inclined plane *b* is equal in diameter to a standard or genuine coin.

The operation is as follows: In order to put the coin in the drawer and test it at the same time, it is placed on the inclined plane *b*, and it slips down by its own gravity into spout *I* and is stopped by the projection *g*. The coin, being a trifle heavier than the weight *f*, tilts the spout *I*, as shown in red, Fig. 3, and the coin consequently drops into the drawer, the spout returning to its original position under the action of weight *f* as soon as the coin leaves it. If the coin be not a genuine one, it must be lighter if of the same dimensions, and consequently will be incapable of tilting the spout *I*, and if it be equal in weight to a genuine one its dimensions must be greater, the diameter being larger, or, if of equal diameter, of greater thickness; hence a counterfeit coin of the standard weight and thickness will be prevented from passing fully down on the spout *I*, the distance between the spout *g* and the lower edge of *b* being too short to allow it to clear *b* and pass into the spout; and if the spurious coin be of the proper standard diameter it must be thicker, and the space between the bottom of the spout and the lower edge of *a* will not be sufficiently high for it to pass through.

The spouts *I* may be made of various sizes to suit different-sized coins, and loaded accordingly. The invention, it will of course be seen, is applicable to both gold and silver coin.

I would remark that the pendent rods *d d*

may be allowed to yield or give a trifle under pressure, in order to compensate for the slight variation in diameter of standard coin, produced by the milling of the edges. This variation, however, is so slight that it cannot affect the efficiency of the device as a detector.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The particular arrangement of the horizon-

tal plate A, vertical plate *a*, inclined plane *b*, and spout I, provided with the sides *c c* and stop *g*, and suspended between the pendent yielding rods *d d*, substantially as and for the purpose herein set forth.

WM. PAINTER.

Witnesses:

ROBT. CHALFANT,
EDWD. PAINTER.