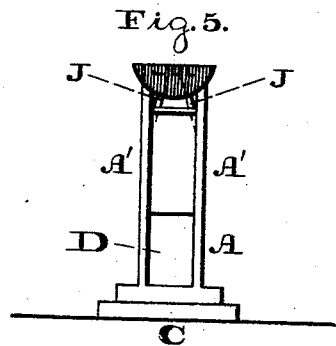
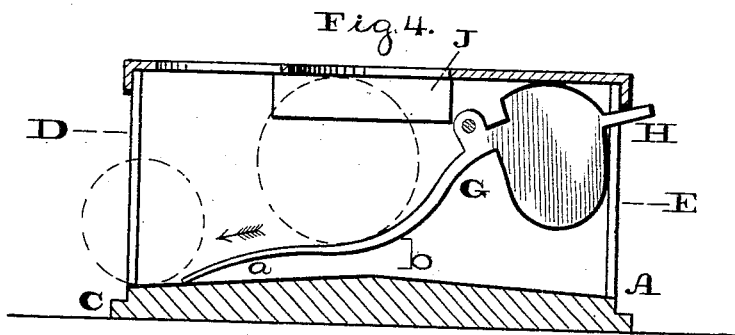
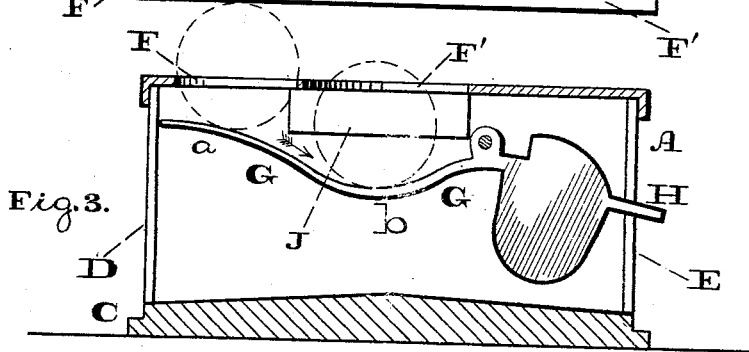
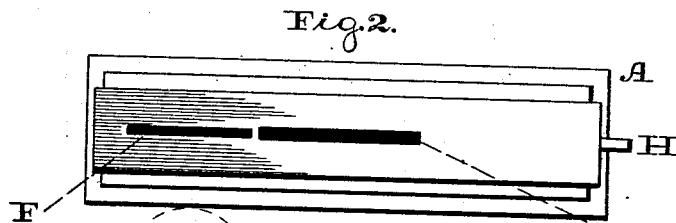
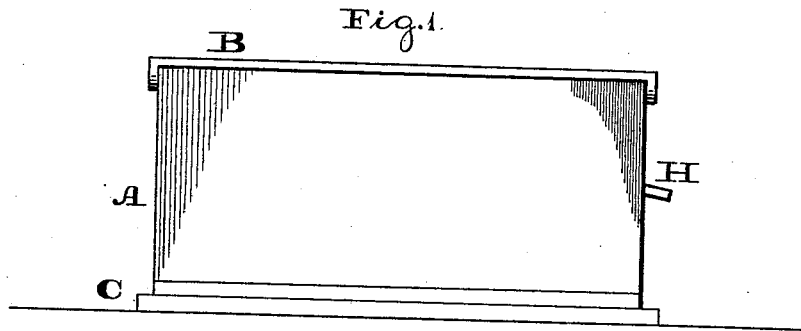


E. KRONENBERG.
COUNTERFEIT COIN DETECTORS

No. 195,451.

Patented Sept. 25, 1877.



Witnesses:
Lewis F. Brown,
Robt. P. Grant.

Inventor:
E. Kronenberg,
by *John A. Dederheim*
Attorney.

UNITED STATES PATENT OFFICE.

EDWARD KRONENBERG, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR
TO HORACE BALDWIN, OF SAME PLACE.

IMPROVEMENT IN COUNTERFEIT-COIN DETECTERS.

Specification forming part of Letters Patent No. **195,451**, dated September 25, 1877; application filed
March 2, 1877.

To all whom it may concern:

Be it known that I, EDWARD KRONENBERG, of the city and county of Philadelphia, and State of Pennsylvania, have invented a new and useful Improvement in Counterfeit-Coin Detectors, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a side elevation of the implement embodying my invention. Fig. 2 is a top view thereof. Figs. 3 and 4 are central longitudinal sections thereof. Fig. 5 is an end view thereof.

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

My invention consists of a case having in its top plate two slots, of the gage of the coin, and an inclosed single balance, so constructed that coins of different denominations may be weighed thereby, the spurious pieces being detected by their inability to materially depress the balance and roll therefrom.

It also consists of a projecting arm for controlling the balance, so that spurious coin may be readily removed from the case.

It also consists of guides depending from the top plate of the case below one or both of the slots thereof, whereby the spurious coin during the operation of removal will not catch under the top plate.

Referring to the drawings, A represents a case, consisting of sides A' A', top plate B, base C, open end D, and slotted end E.

In the top plate B there are two slots, F F', which are of different lengths, and adapted, say, for half and quarter dollars, and they extend end to end in the longitudinal direction of the case.

Within the case, below the top plate B, there is mounted a balance, G, consisting of an elliptical-shaped or dishing bar, of such length as to project beneath both slots F F', and so weighted or hung that the weight of either a half or quarter dollar applied through the respective slot and rested on the bar will depress the balance.

It will be noticed that the portion *a* of the balance beneath the short slot F curves or extends slightly upward, and the portion *b* beneath the long slot F' curves downward, the

free end of the balance being at the open side D of the case.

On the weighted portion of the balance there is an arm, H, which is secured thereto or formed therewith, and it projects through the slotted end E of the case, so as to be readily handled.

From the top plate B, and beneath the walls of the slot F', there depend two vertically-extending bars, J, which flare, the widest part being below.

The operation is as follows: If a genuine half-dollar is placed through the slot F', or a genuine quarter-dollar through the slot F, it will rest circumferentially on the balance, and it overcomes the latter, so as to cause it to descend and assume such position that the coin will roll therefrom and escape through the open end D of the case, whereby its genuineness is established, after which the balance returns to its normal position.

Should a spurious half-dollar be placed on the balance, the latter will not materially descend, and the depression or downward curvature of the portion *b* of the balance prevents the spurious piece rolling therefrom, whereby it projects sufficiently above the top plate to indicate its nature. The same is true of a spurious quarter-dollar, only that it will roll into the portion *b* of the balance and project upward through the slot of the larger piece, the result and indication of which being similar to that stated of the larger piece.

In order to remove the spurious pieces the arm H will be held so as to render the balance immovable, whereby said pieces may be readily grasped by hand, or the arm will be raised, whereby the balance descends and the pieces roll therefrom through the opening D of the case.

It will be noticed that the same balance is employed for weighing coin of different denominations, the operation depending upon the introduction of the coin into the proper slot of the case.

As spurious pieces depress the balance to a limited extent, and they are liable to catch under the top plate, the bars J are employed to prevent the same, their service being to direct or guide the pieces into and tip through

the slot F', whereby they are readily accessible.

It is evident that the slots F F' act as gages to detect the genuine and spurious by their thickness and diameters.

I do not claim as my invention an independent or separate balance for each coin of a different denomination

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

1. The case having a top plate formed with two slots, F F', of different lengths, and extending longitudinally end to end, in combination with the single balance G, projecting beneath both slots, and having an upwardly-

extending portion, *a*, and downwardly-extending portion *b*, substantially as and for the purpose set forth.

2. The case and balance, in combination with an arm, H, secured to the balance and projecting through the case, substantially as and for the purpose set forth.

3. The case with a slotted top plate and the balance, in combination with depending guiding-bars J, substantially as and for the purpose set forth.

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