

No. 847,438.

PATENTED MAR. 19, 1907.

W. A. RALSTON.

COIN SORTER.

APPLICATION FILED MAR. 19, 1906.

FIG. 1.

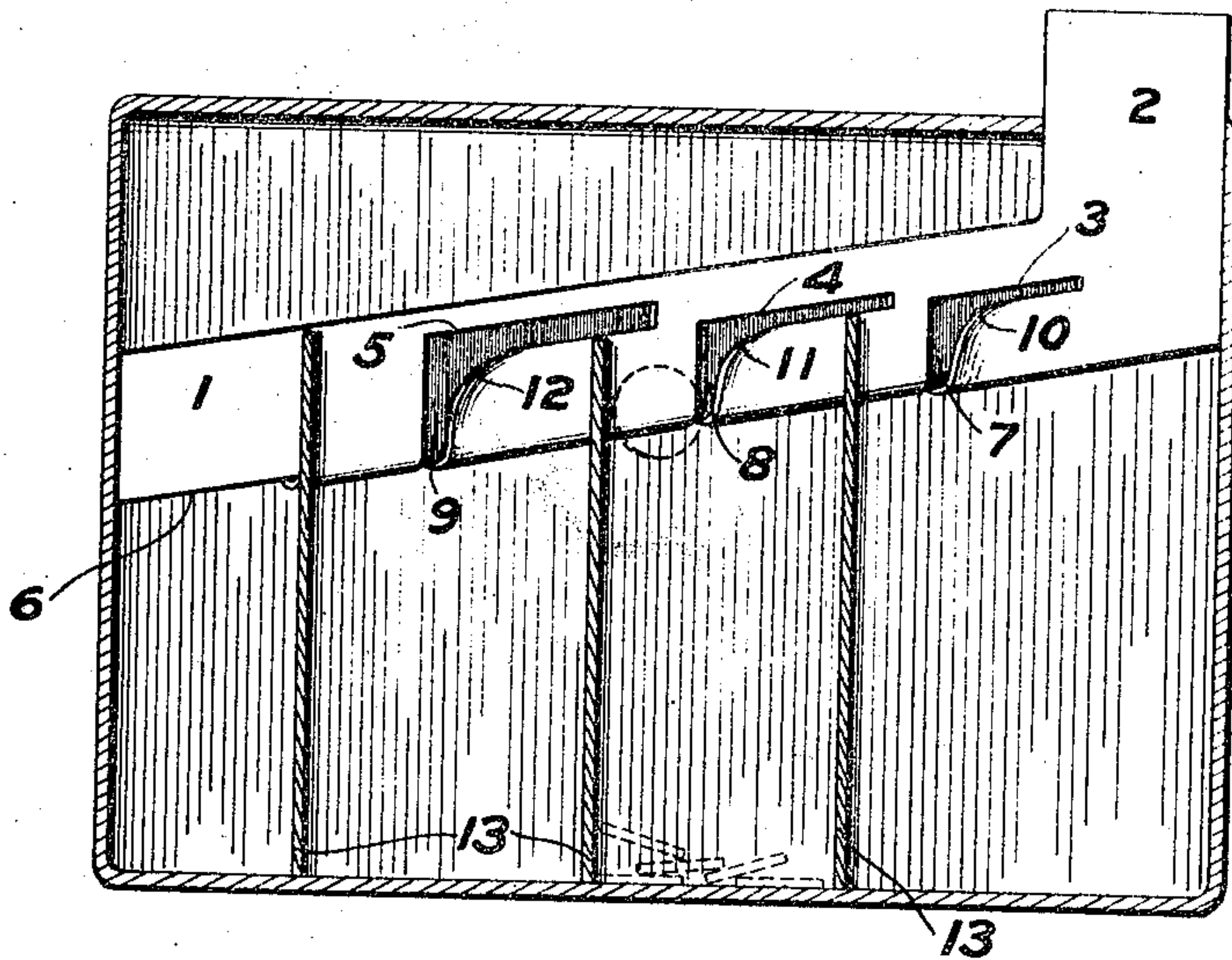


FIG. 3.

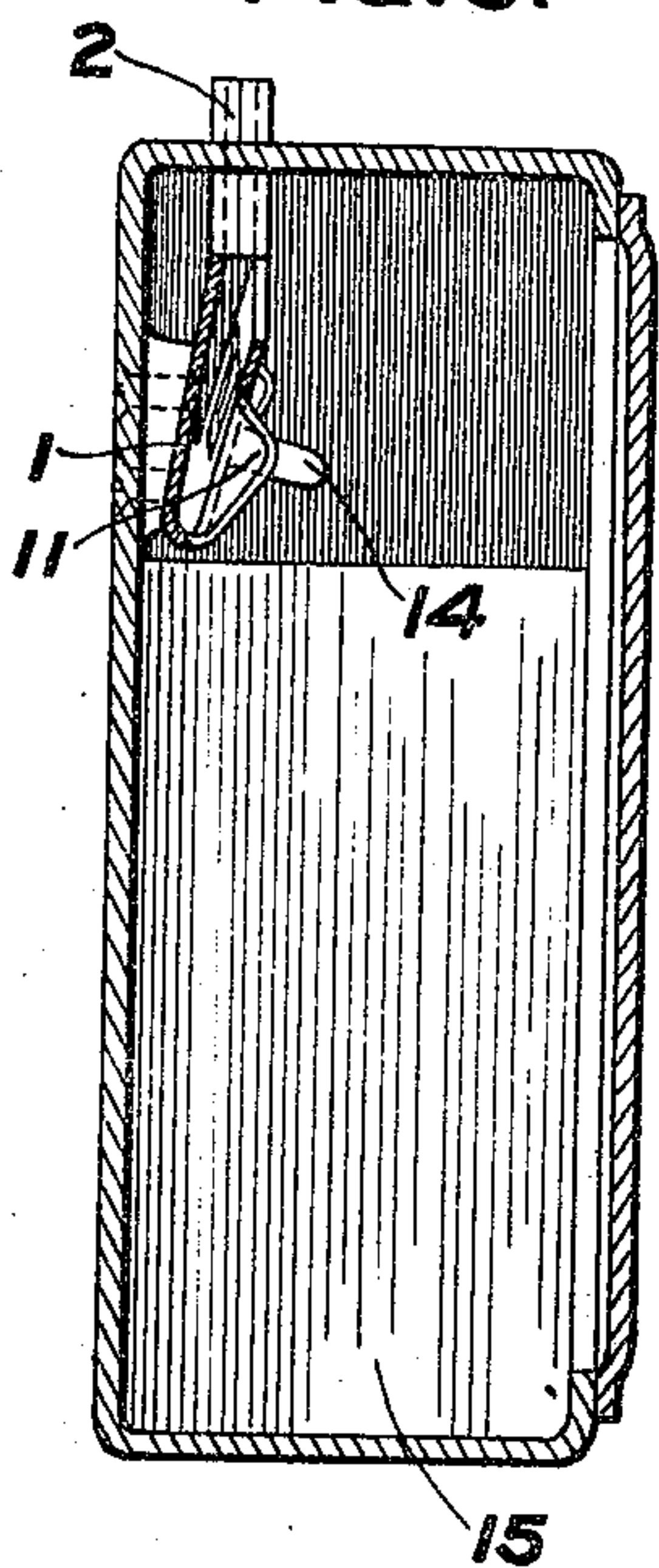
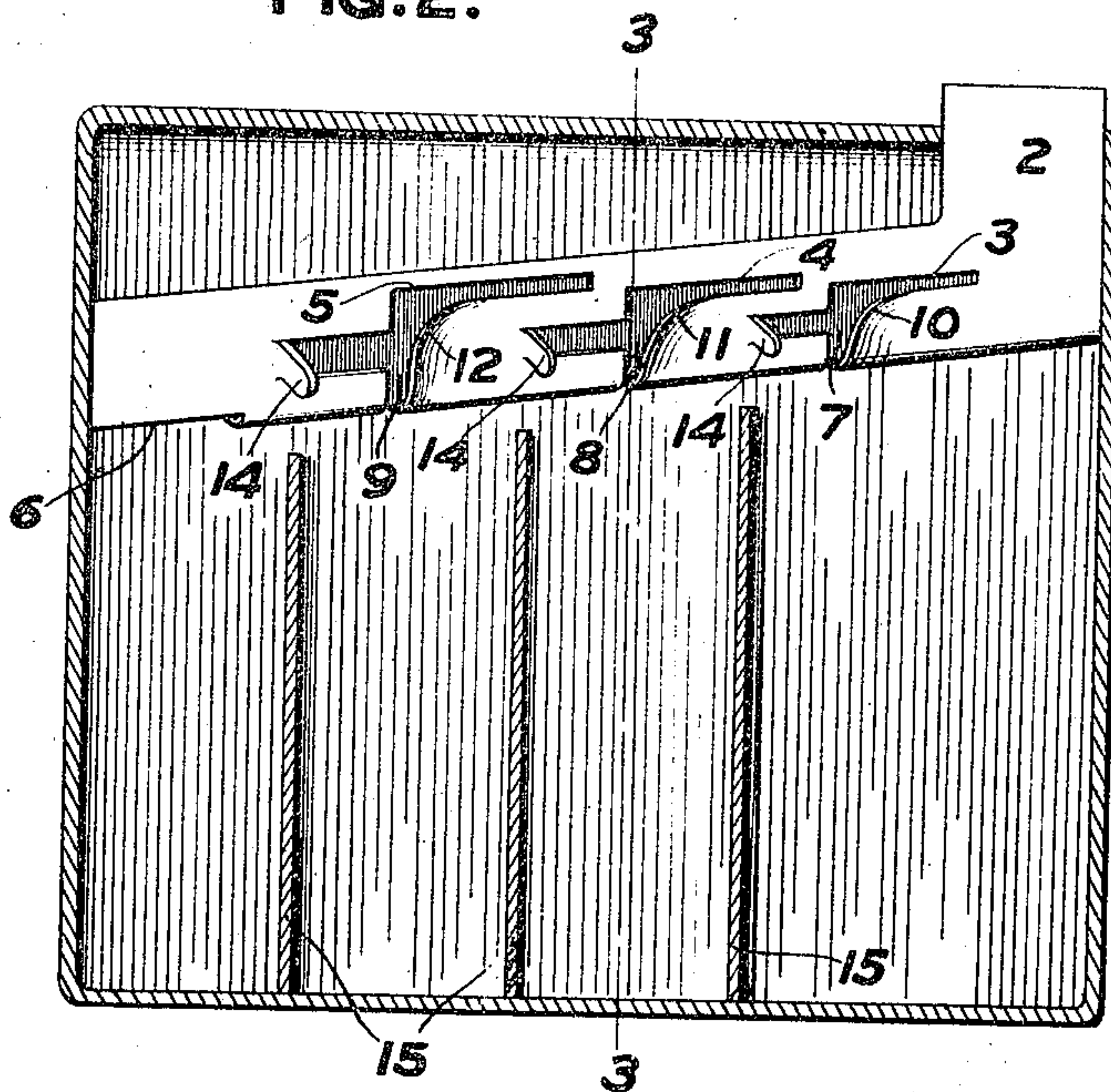


FIG. 2.



WITNESSES:

Clarence W. Carroll.
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H. Gurnee.

INVENTOR:

William A. Ralston
of Ogden & Davis
his attys

UNITED STATES PATENT OFFICE.

WILLIAM A. RALSTON, OF ROCHESTER, NEW YORK, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, OF ONE-HALF TO GEORGE R. FULLER AND ONE-FOURTH TO FRANK T. BYRNE, OF ROCHESTER, NEW YORK.

COIN-SORTER.

No. 847,438.

Specification of Letters Patent.

Patented March 19, 1907.

Application filed March 19, 1906. Serial No. 306,750.

To all whom it may concern:

Be it known that I, WILLIAM A. RALSTON, a citizen of the United States, and a resident of Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Coin-Sorters, of which the following is a specification.

This invention relates to coin-sorters, and consists in the apparatus hereinafter described and claimed.

The object of the invention is to provide a coin-sorting device that is efficient, simple to make, and difficult to derange.

In the drawings, Figure 1 is a vertical section through a box containing a coin-sorting device embodying this invention. Fig. 2 is a vertical section through a similar box containing the same coin-sorting device having a slight modification in its construction, and Fig. 3 is a vertical cross-section on the line 3-3 of Fig. 2.

This coin-sorting device is preferably made of sheet metal, although it may be cast or manufactured from the solid; but in the drawings hereof it is shown as made of sheet metal.

The device embodies an inclined trough-shaped guideway 1, which may be open at the top, as shown most clearly in Fig. 3, and is provided with an inlet-orifice, shown in the present case in the vertical extension 2 at the upper end of said guideway. The device is adapted particularly to separate coins of different diameters, and for this purpose at different suitable distances from the entrance end of the guideway are provided a series of outlets for the respective coins. These outlets are constructed by cutting a slot having the shape of two sides of a right angle through a wall of said guideway and then bending out the corner thus freed. The distance from the bottom of the guideway to the edge 3, that is parallel to the bottom of the guideway and forms part of the selecting device for the coins of least diameter, is such that the coin may just pass through the orifice underneath said edge 3, but that any coin of larger diameter will not pass under said edge 3, but will continue on in the guideway. The corresponding edge 4 of the next orifice is of such diameter as just to permit the coin for which it is adapted to pass out from the guideway, and the next edge 5 is still further from the

bottom of the guideway and is adapted to permit another coin of the next greater diameter to pass out therefrom, while from the end of the guideway—as, for instance, through an orifice 6—another coin of still larger diameter may pass through. The guideway is not only inclined from its beginning downward to its discharging end, but is also inclined in a plane intersecting a plane passing through the bottom of the guideway, so that coins will tip and roll along the side having the discharge-openings 7, 8, and 9, corresponding to the graded edges 3, 4, and 5. The corners 10, 11, and 12 are bent outward, so that the coin running along the inner surface of the guideway will, when it begins to pass out from the guideway and to come in contact with the corner 10, gradually tilt more and more outward from the guideway, so that a certainty of discharge is obtained.

In order that the coins may be kept apart, the coin-sorting device above described is usually placed in a box provided with segregating means for the respective coins. Thus in Fig. 1 the box has a series of partitions 13, forming compartments in the box for coins of the different sizes. In the device shown in Fig. 2 tongues 14 are bent out from the guideway itself, so that coins issuing through the discharge-orifices shall strike the tongues and be caused to drop directly into the compartment underneath for that coin. In Fig. 2 the partitions 15 catch the coins after they have been checked by the tongues 14 and have dropped from the guideway.

What I claim is—

1. In a coin-sorting device, an inclined guideway having substantially right-angled slots in one wall, one side of each slot being substantially parallel to the bottom of the guideway and at a distance therefrom slightly greater than the diameter of a particular coin, the other side of said slot extending to the bottom of the guideway and the free corner of the wall being bent outward from the guideway, the said slots being so arranged that the larger coins will be discharged through the vertical slots nearer the end of the guideway.

2. In a coin-sorting device, a guideway having a longitudinal and a transverse inclination and having substantially right-angled slots in the lower wall thereof, one

side of each slot being substantially parallel to the bottom of the guideway and at a distance therefrom slightly greater than the diameter of a particular coin, the other side of said slot extending to the bottom of the guideway and the free corner of the wall being bent outward from the guideway, the said slots being so arranged that the larger coins will be discharged through the vertical slots nearer the end of the guideway.

3. In a coin-sorting device, an inclined guideway having substantially right-angled slots in one wall, one side of each slot being substantially parallel to the bottom of the guideway and at a distance therefrom slightly greater than the diameter of a particular coin, the other side of said slot extending to the bottom of the guideway and the free corner of the wall being bent outward from the guideway, the said slots being so arranged that the larger coins will be discharged through the vertical slots nearer the

end of the guideway, and a stop for the coins issuing from each vertical slot.

4. In a coin-sorting device, a guideway having a longitudinal and a transverse inclination and having substantially right-angled slots in the lower wall thereof, one side of each slot being substantially parallel to the bottom of the guideway and at a distance therefrom slightly greater than the diameter of a particular coin, the other side of said slot extending to the bottom of the guideway, and the free corner of the wall being bent outward from the guideway, the said slots being so arranged that the larger coins will be discharged through the vertical slots nearer the end of the guideway, and a stop for the coins issuing from each vertical slot.

WILLIAM A. RALSTON.

Witnesses:

D. GURNEE,
L. THON.