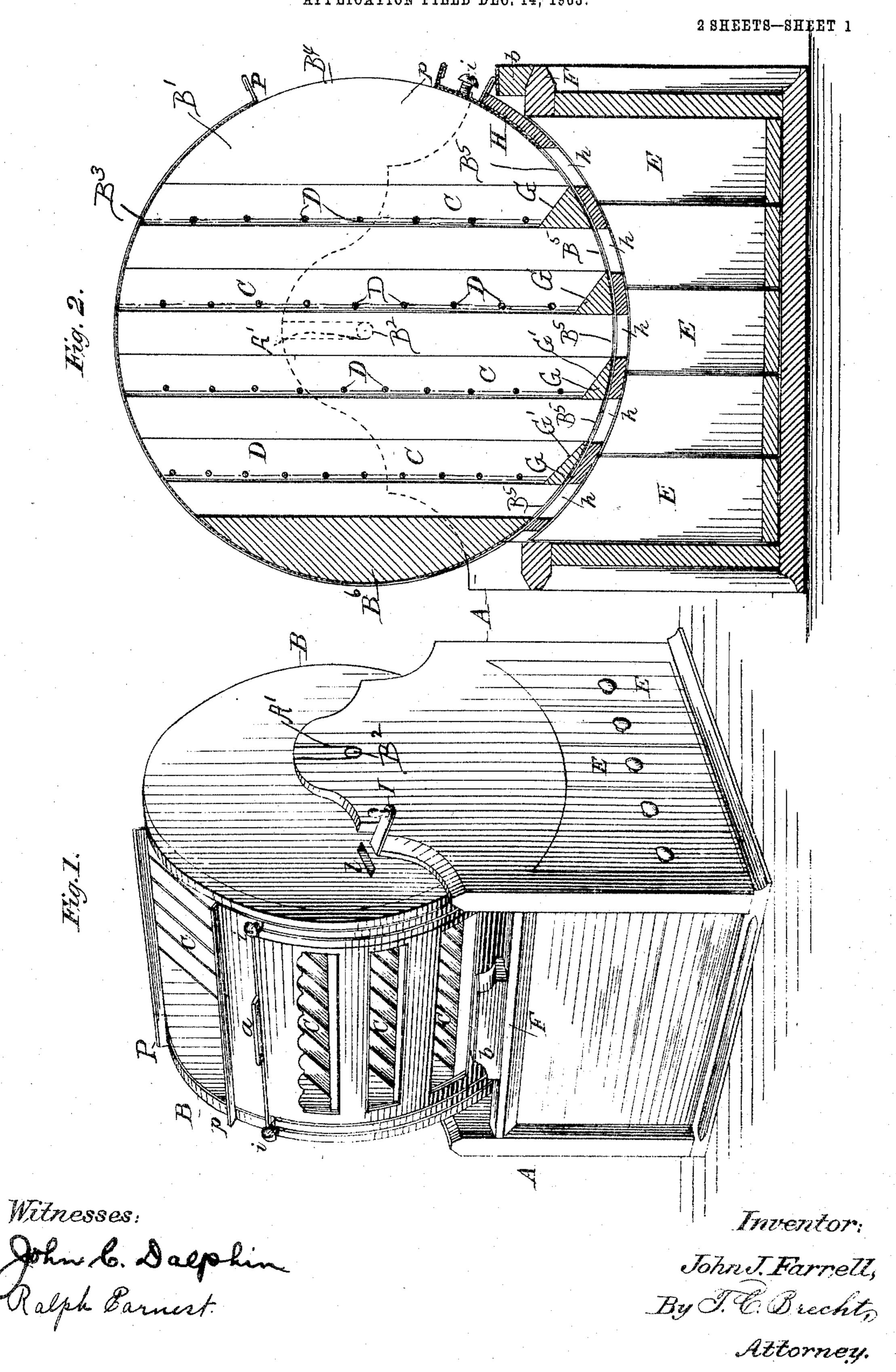
J. J. FARRELL.

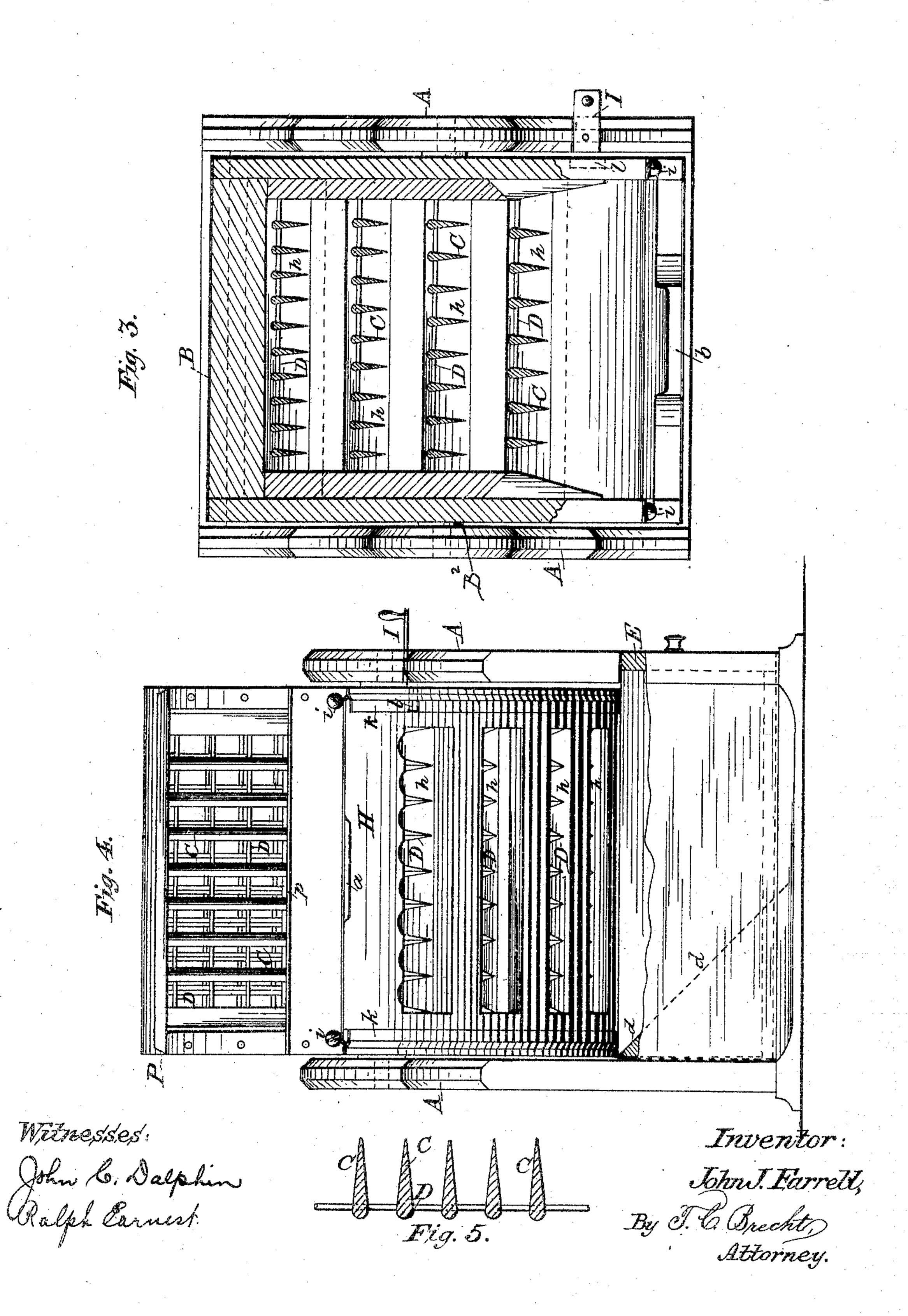
COIN ASSORTER.

APPLICATION FILED DEC. 14, 1903.



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## UNITED STATES PATENT OFFICE.

JOHN J. FARRELL, OF ATLANTIC CITY, NEW JERSEY.

## COIN-ASSORTER.

SPECIFICATION forming part of Letters Patent No. 780,270, dated January 17, 1905.

Application filed December 14, 1903. Serial No. 185,126.

To all whom it may concern:

Be it known that I, John J. Farrell, a citizen of the United States, residing at Atlantic City, in the county of Atlantic and State of New Jersey, have invented certain new and useful Improvements in Coin-Assorters, of which the following is a specification.

My invention relates to devices for assorting coins, and has for its object to provide a device into which a quantity of coins of different denominations may be placed and by which the coins will be quickly and accurately assorted each denomination by itself and will be deposited in the receptacles provided for the different denominations.

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In taking in money for purchases in stores, in banks for deposit, on street-cars or elsewhere for tickets, in churches for collections, and in places of amusement it is not generally 20 possible to assort the coins as they are paid in, and as a result there is usually each day an accumulation of mixed coins, including cents, nickels, dimes, quarters, and half-dollars. In order to determine the amount, it is 25 necessary to assort the coins and count each denomination separately. To assort the coins by hand where the quantity of coins is considerable, as would be the case in the office of a street-railway in a large city, necessitates 3° the employment of special clerks and considerable expense, and it is for the purpose of avoiding this expense by mechanically assorting the coins that my invention has been devised.

With the above-explained objects in view my invention consists in the construction and arrangement of parts hereinafter described, and particularly pointed out in the claims.

Referring to the drawings, in which like letters indicate the same parts in the different figures, Figure 1 is a perspective view of my invention, showing the barrel or cylinder tipped forward. Fig. 2 is a vertical cross-sectional view of the invention on a plane at right angles to the axis of the barrel or cylinder, showing the latter in position to discharge the assorted coins. Fig. 3 is a cross-sectional view taken on a horizontal plane through the axis of the barrel or cylinder, showing the latter in position to discharge the

assorted coins. Fig. 4 is a front view of the device, showing it in position to discharge the assorted coins; and Fig. 5 is a detail.

In the drawings, A is the casing or support, in which the barrel or cylinder B is mounted 55 to rotate and in the lower part of which are arranged the receptacles E for the assorted coins. The barrel or cylinder B has heads B', preferably solid and provided at their centers with pivots B<sup>2</sup>, adapted to be received in bear- 60 ings A' in the sides of the casing or support A. The bearings A' are preferably open at the top, as shown, to permit of removal of the barrel or cylinder from the casing. The heads B' are connected by a shell B', of sheet mate- 65 rial, which is secured to the peripheries of the heads and forms, with the heads, a hollow cylinder or barrel. Within the cylinder or barrel B are arranged parallel bars C at right angles to the axis of the cylinder or barrel, 70 these bars being arranged in tiers, the bars of each tier being spaced apart a sufficient distance to permit coins to pass freely between them edgewise, the distance between the bars not, however, being as great as the 75 diameter of any of the coins to be assorted.

The bars C are preferably of the form of an inverted V in cross-section, as shown Figs. 3 and 5, and preferably have their bases rounded off. Through these bars, near their bases, 80 rods D extend, the rods being at right angles to bars C. The rods of the different tiers are spaced apart different distances.

In the construction shown in the drawings there are four tiers of bars, the device being 85 shown arranged for assorting half-dollars, quarters, dimes, nickels, and cents. The rods D of the uppermost tier (shown at the right in Fig. 2) are spaced apart a sufficient distance to permit coins less than a half-dollar to pass 90 between them, the rods of the second tier are spaced apart a sufficient distance to permit coins less than a quarter to pass between them, the rods of the third tier are spaced apart a sufficient distance to permit coins less in size 95 than a nickel to pass between them, and the rods of the fourth tier are spaced apart a sufficient distance to permit coins less in size than a cent to pass between.

At the front ends of the bars C, which be- 100

come their lower ends when the cylinder or barrel is tilted to the position in which it is shown in Fig. 2, bars G are provided, having

inclined faces G'.

The shell B<sup>3</sup> is provided with an opening B4, through which the coins may be inserted, and with openings B<sup>5</sup> above the first tier of bars C, between the tiers of bars, and below the lowest tier of bars, through which the ro coins may be discharged. A slide H, adapted to move in ways H', secured to the heads B', is provided with openings h, correponding to the openings B<sup>5</sup>. Stops i limit the movement of the slide H.

Below the cylinder B are provided receptacles E, consisting of drawers having sides of thin material, such as sheet-tin, fitting closely together and having their upper ends shaped to conform to the periphery of the slide H.

20 These drawers or receptacles are arranged to slide in the casing on lines parallel with the axis of the cylinder-barrel B.

Below the lowest tier of bars C' and separated therefrom by a sufficient distance to per-25 mit of the passage of the coins of the smallest

size is a solid segment B.

At the upper edge of the front of the casing A a cross-bar F is provided, carrying a lug b, the upper edge of which is in the path of a 30 projection a on the upper edge of the side H.

At both edges of the opening B<sup>4</sup> the shell is preferably turned up to form projections by which the cylinder or barrel may be readily

manipulated.

In one of the heads B' is formed a notch l, into which stop I, pivoted on the casing, may be turned to lock the cylinder or barrel against rotation.

In using the device for assorting coins the 40 barrel or cylinder is turned so that the opening B4 will be at the top, in which position it may be locked by the stop I, and the slide H is pushed downward, closing the openings B<sup>5</sup>. The coins to be assorted are then poured 45 in through the opening B<sup>4</sup>, falling upon the uppermost tier of bars C. The bars C by reason of their inverted-V form cause the coins to fall edgewise upon the rods D, and all of them which are not too large to 50 pass between adjacent rods will drop onto the next tier, and so on, the half-dollars being left resting on the rods of the first tier, being prevented from falling flat upon the rods by the bars C, the quarters resting in the same 55 way on the rods of the second tier, the nickels on the rods of the third tier, the cents on the rods of the fourth tier, and the dimes resting on the face of the segment B<sup>6</sup>. The barrel or cylinder is then rocked to insure that the coins 60 shall drop to their proper tier and is finally

swung forward sharply, causing the projection a to strike the lug b, stopping the slide H, so that by the further movement of the lowest barrel or cylinder the openings B° of

65 the shell will be brought into line with the

openings h of the shell. By this movement the bars C are brought into the position in which they are shown in Fig. 2, and the coins resting on the rods of the several tiers will fall to the lower ends of the bars and by the 7° inclined faces G' of the bars G will be guided to the openings B5, through which they will fall into the receptacle E.

Having thus described my invention, what I claim as new, and desire to secure by Letters 75

Patent, is—

1. In a coin-assorter, a cylinder having a series of bars arranged therein in tiers at right angles to its axis and rods parallel with the axis extending through the bars, the cylinder 80 also having openings therein between the tiers at one end of the bars and a support in which the cylinder is mounted to rotate on its axis.

2. In a coin-assorter, a cylinder having a series of bars arranged therein in tiers at right 85 angles to its axis and rods parallel with the axis extending through the bars, the cylinder also having openings therein between the tiers at one end of the bars, a slide arranged to close said openings, and a support in which the cyl- 90 inder is mounted to rotate on its axis.

3. In a coin-assorter a cylinder having a series of bars arranged therein in tiers at right angles to its axis, the bars being spaced apart a distance less than the diameter of the coins 95 to be assorted, rods parallel with the axis of the cylinder extending through the bars, the cylinder also having openings therein between the tiers at one end of the bars, and a support in which the cylinder is mounted to rotate on 100 its axis.

4. In a coin-assorter a cylinder having a series of bars arranged therein in tiers at right angles to its axis, the bars being spaced apart a distance less than the diameter of the coins 105 to be assorted, rods parallel with the axis of the cylinder extending through the bars, the cylinder also having openings therein between the tiers at one end of the bars, and a slide arranged to close said openings, and a support 119 in which the cylinder is mounted to rotate on its axis.

5. In a coin-assorter, a cylinder having a series of bars arranged therein in tiers at right angles to its axis, the bars being of the shape 115 of an inverted V in cross-section and being spaced apart a distance less than the diameter of the coins to be assorted, rods parallel with the axis of the cylinder extending through the bases of the bars, the cylinder also having 120 openings therein between the tiers at one end of the bars, and a support in which the cylinder is mounted to rotate on its axis.

6. In a coin-assorter, a cylinder having a series of bars arranged therein in tiers at right 125 angles to its axis, the bars being of the shape of an inverted V in cross-section and being spaced apart a distance less than the diameter of the coins to be assorted, rods parallel with the axis of the cylinder extending through 130

the bases of the bars, the cylinder also having openings therein between the tiers at one end of the bars, a slide arranged to close said openings, and a support in which the cylinder is mounted to rotate on its axis.

7. In a coin-assorter, a cylinder having a series of bars arranged therein in tiers at right angles to its axis, and rods parallel with the axis extending through the bars, the rods of the several tiers being spaced apart to correspond with the diameter of the different coins, the cylinder also having openings therein between the tiers at one end of the bars, and a support in which the cylinder is mounted to rotate on its axis.

8. In a coin-assorter, a cylinder having a series of bars arranged therein in tiers at right angles to its axis, and rods parallel with the axis extending through the bars, the rods of the several tiers being spaced apart to correspond with the diameter of the different coins, the cylinder also having openings therein between the tiers at one end of the bars, a slide arranged to close said openings, and a support in which the cylinder is mounted to rotate on its axis.

9. A coin-assorter, comprising a casing, a cylinder pivotally mounted in the casing, a series of beveled transverse bars placed parallel 3° to each other in said cylinder, rods crossing said bars, said bars and rods forming compartments through which the coins drop and are assorted, and a series of drawers below said cylinder.

10. A coin-assorter, comprising a casing, a

cylinder pivotally mounted in the casing, a series of beveled transverse bars placed parallel to each other in said cylinder, rods crossing said bars, the bars and rods forming compartments, the distance between said rods decreasing correspondingly to the size of the coins, which drop through the compartments formed and are assorted, as specified.

11. A coin-assorter, comprising a casing, a cylinder pivotally mounted in the casing, a series of beveled transverse bars placed parallel to each other in said cylinder, rods crossing said bars, the bars and rods forming compartments, spaced to decrease correspondingly to the size of the coins, and a series of drawers 5° below the cylinder, in position to receive the assorted coins, as set forth.

12. A coin-assorter, comprising a casing, a cylinder pivotally mounted in the casing, a series of beveled transverse bars placed parallel 55 to each other in said cylinder, rods crossing the bars, spaced differentially corresponding to the size of the coins and forming compartments with the bars, through which the coins drop and are assorted, a series of drawers below said cylinders, in position to receive the assorted coins and a stop for holding the cylinder for refilling, as specified.

In testimony whereof I have signed my name to this specification in presence of two wit- 65

nesses.

JOHN J. FARRELL.

Witnesses:

JEANNETTE E. GROVES,

LOUIS A. REPETTO.