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A. B. FLAGG.
COIN SEPARATING BANK.
APPLICATION FILED APR. 13, 1905.

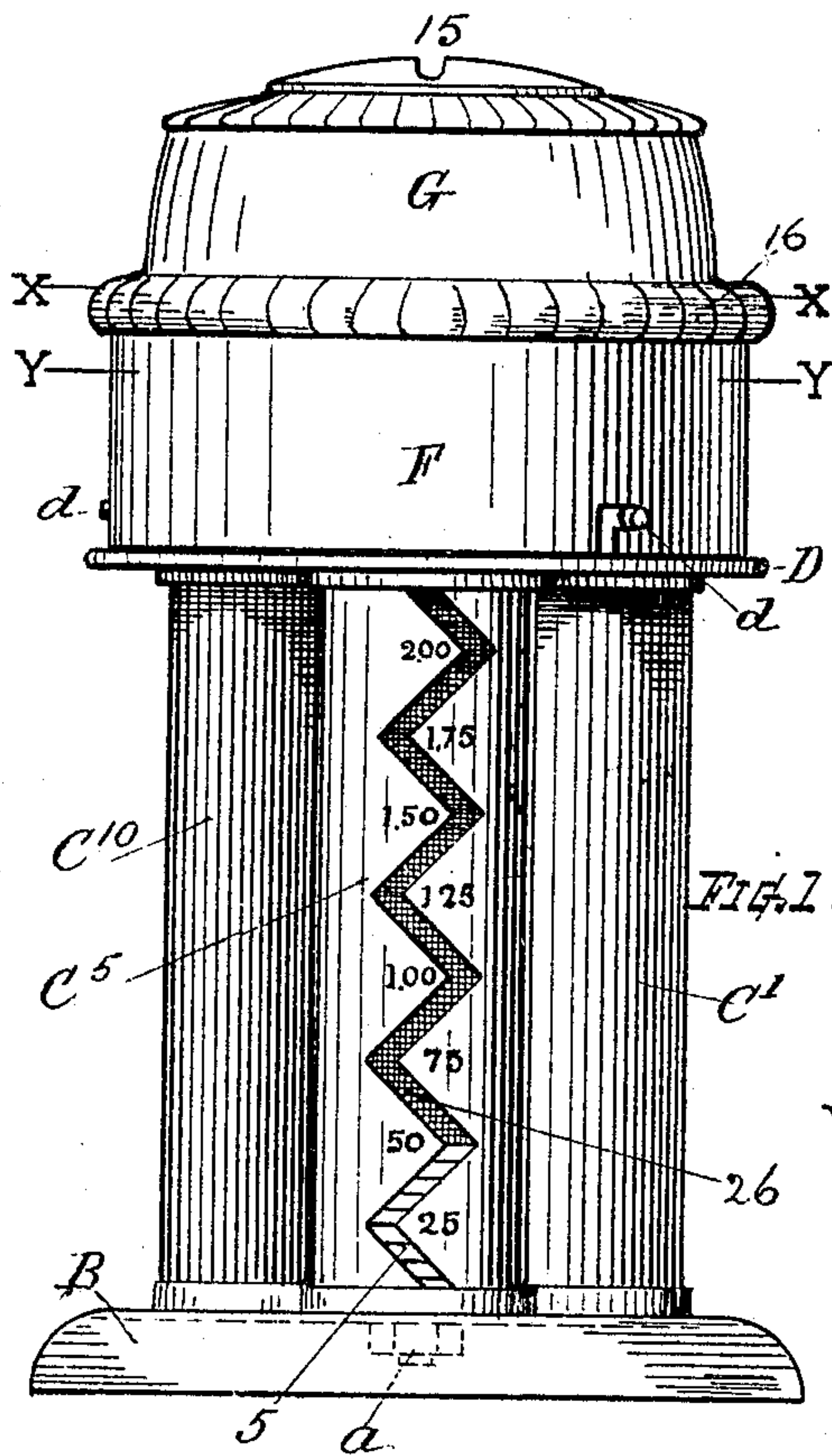


FIG. 1.

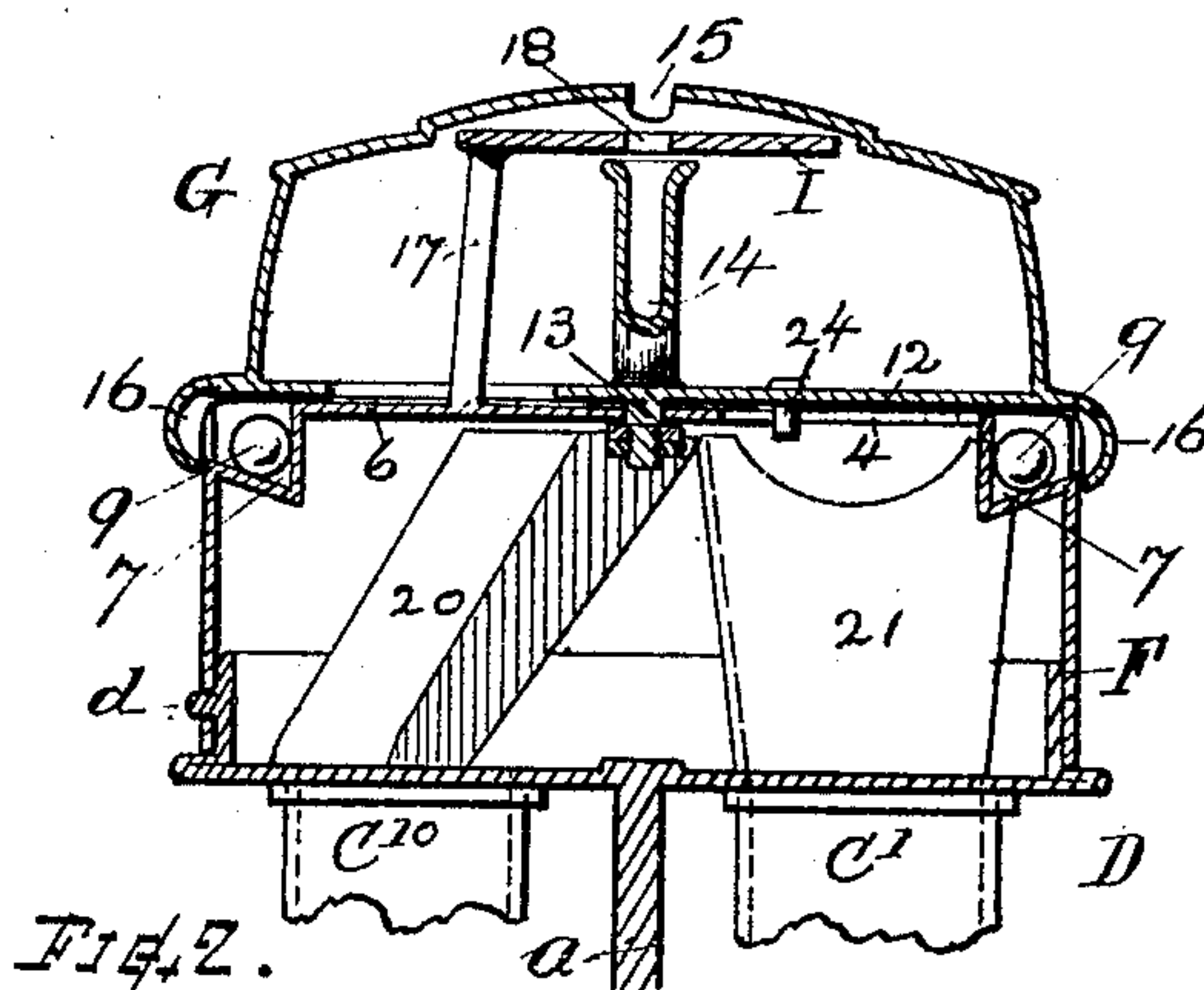


FIG. 2.

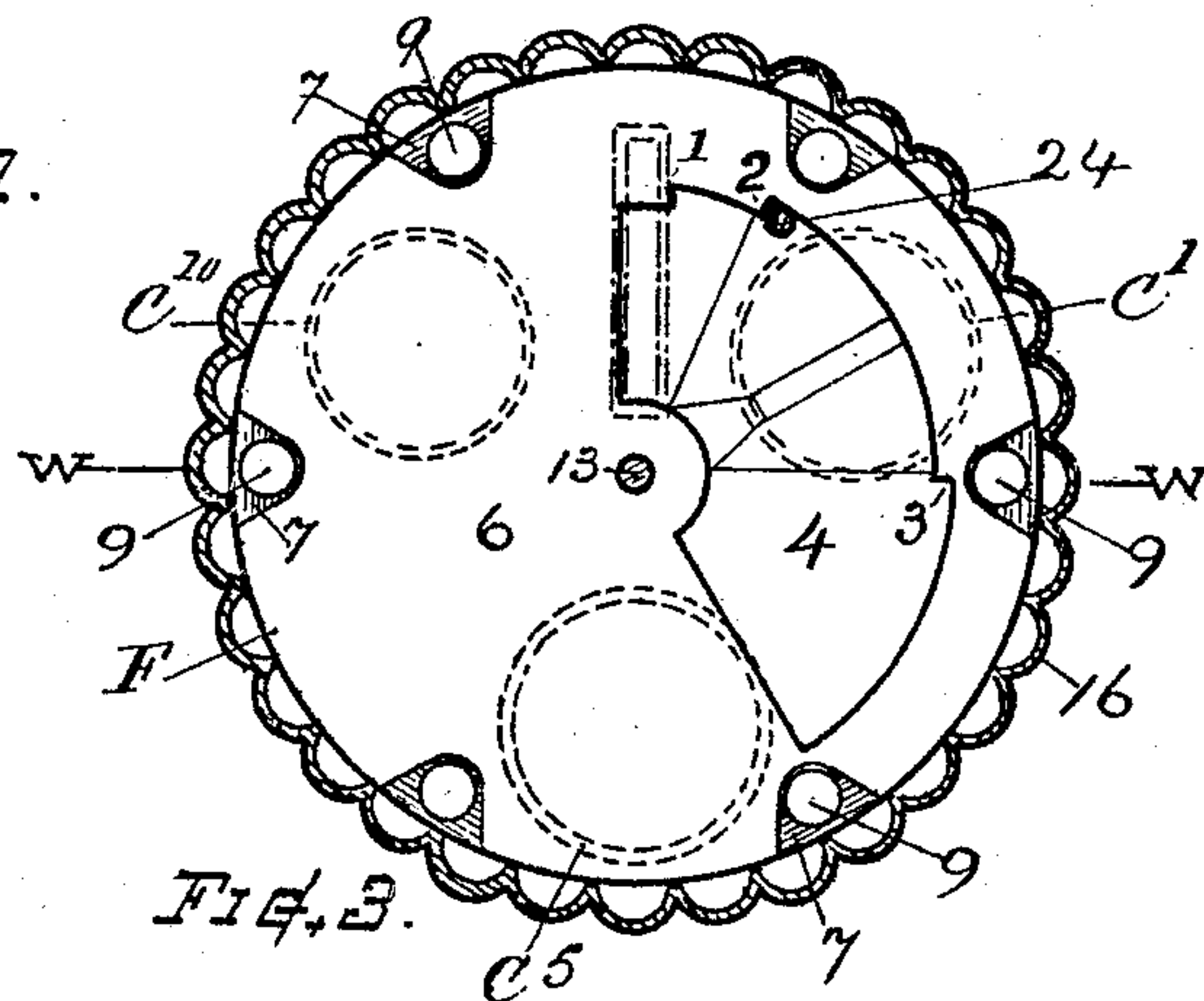


FIG. 3.

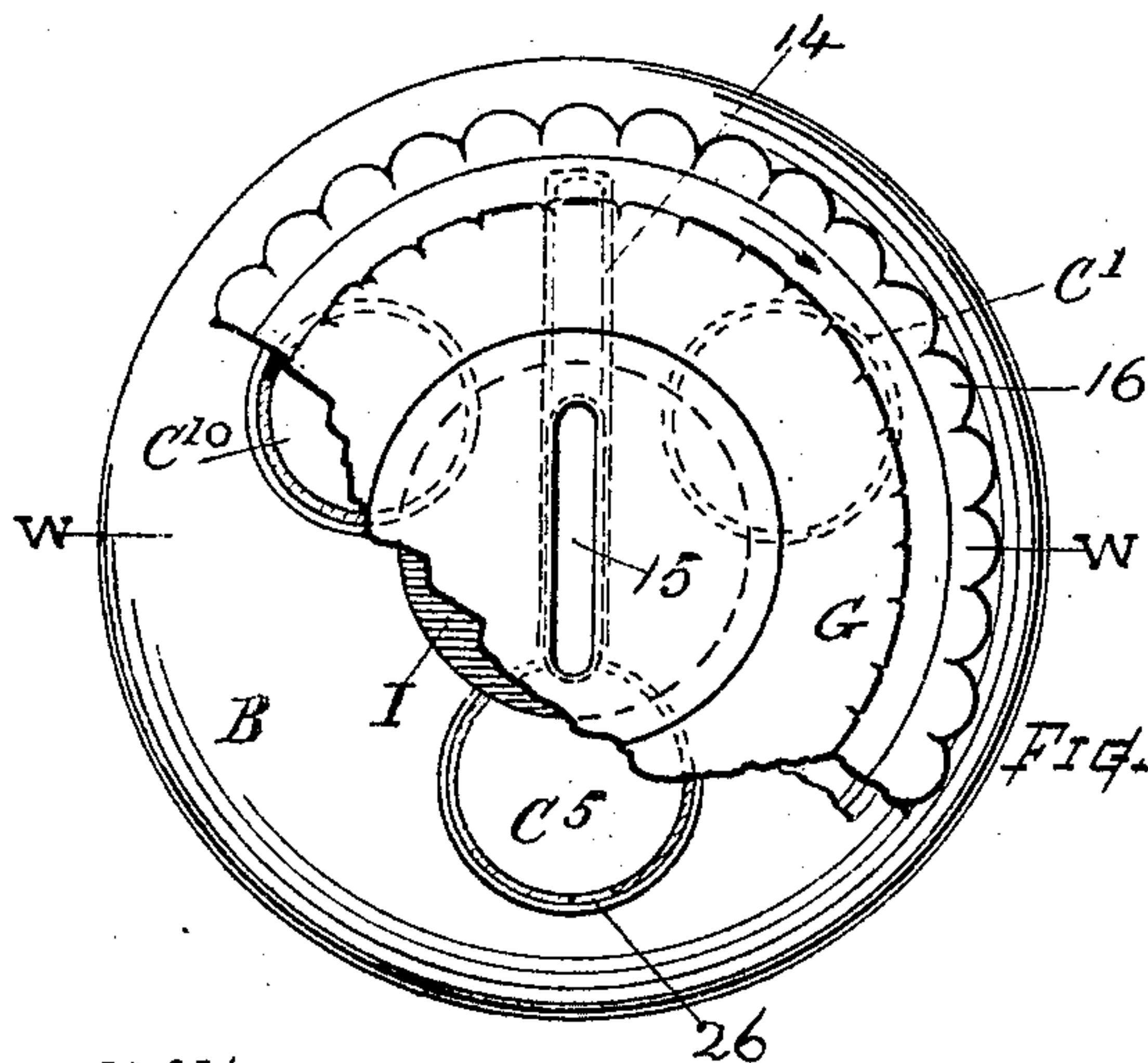


FIG. 4.

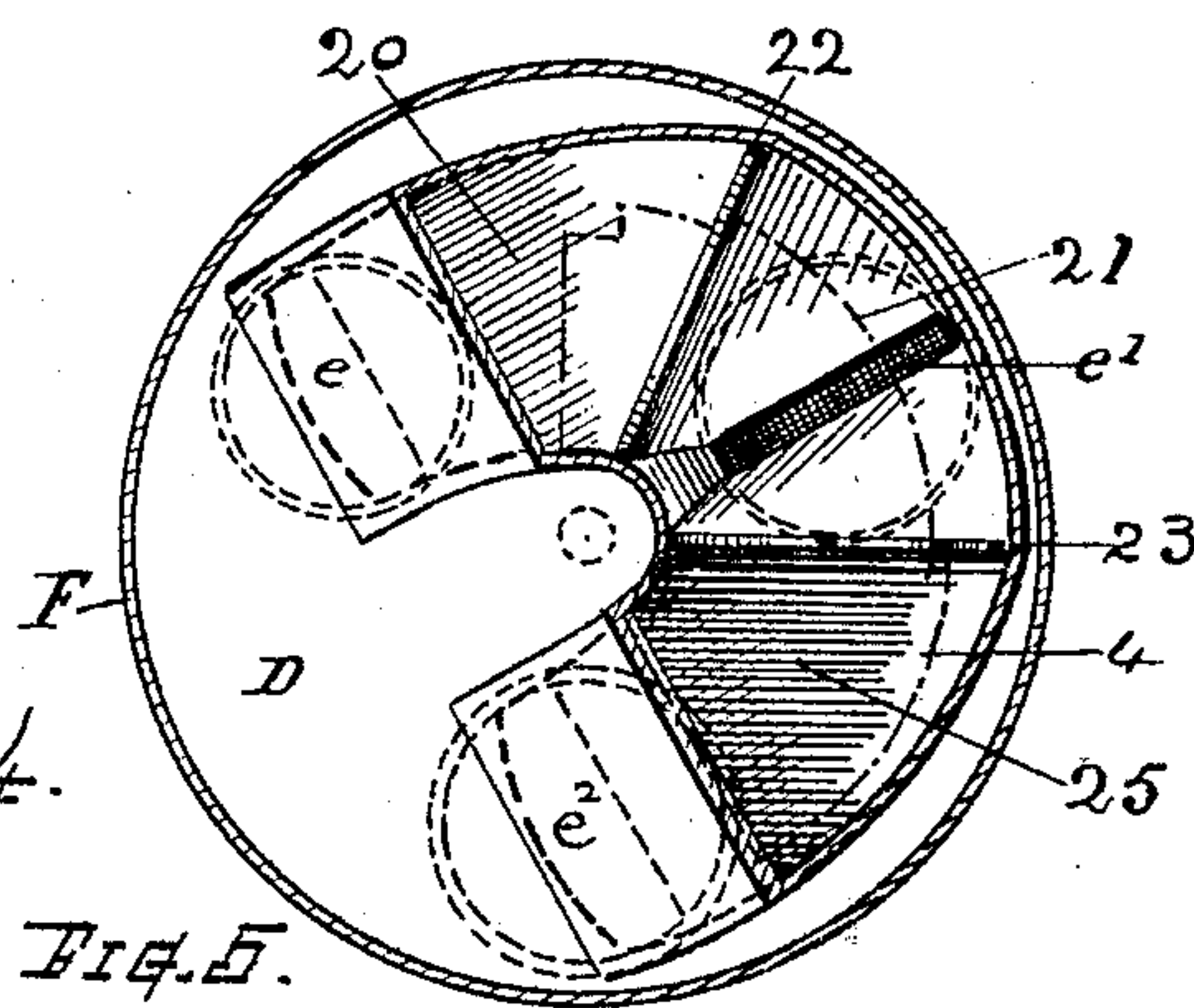


FIG. 5.

WITNESSES.

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UNITED STATES PATENT OFFICE.

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COIN-SEPARATING BANK.

No. 799,318.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, ARTHUR B. FLAGG, a citizen of the United States, residing at Worcester, in the county of Worcester and State of Massachusetts, have invented a new and useful Coin-Separating Bank, of which the following, together with the accompanying drawings, is a specification sufficiently full, clear, and exact to enable persons skilled in the art to which this invention appertains to make and use the same.

The object of my present invention is to provide a toy bank having means for positively separating coins of different sizes or denominations and depositing the same in their proper order.

Another object is to provide an instrument for the purpose named comprising a plurality of columnar coin-receptacles, a slotted receiving-top, and means for selecting and distributing the various coins, as more fully hereinafter described.

Another object is to provide the columnar coin-receptacle with a zigzag indicating-space arranged for denoting predetermined numbers of coins contained therein.

Minor objects and novel features of my invention are more particularly set forth in the following detailed description, the subject-matter claimed being hereinafter definitely specified.

In the accompanying drawings, Figure 1 represents an elevation view of a mechanism embodying my invention. Fig. 2 is a vertical section of the top portion thereof at the line W W on Figs. 3 and 4. Fig. 3 is a horizontal section at line X X on Fig. 1. Fig. 4 represents a plan view showing a portion of the top and a portion in horizontal section below the head, and Fig. 5 is a horizontal section approximately at line Y Y on Fig. 1.

In the construction of this coin-separating bank, as shown in the drawings, I provide a series or plurality of hollow columns, tubes, or receptacles of suitable number and sizes for containing the various denominations of coins for which the bank is designed. In the present instance three columns are employed—C¹⁰, for dimes; C⁵, for cents, and C²⁵, for five-cent pieces or "nickels;" but, if desired, the bank can be made for accommodating other coins, and a greater or less number of columns or receptacles can be employed in the same manner, as hereinafter explained.

B indicates a base or foot plate, and D a head-plate, between which the tubular recep-

tacles are confined in the relative order indicated on the horizontal views by dotted lines, the base B and head-plate D being rigidly attached to each other by a central bolt *a* or by other efficient means.

F indicates a body-section, formed as an inverted cylindrical cup, which is confined to the rim of the head-plate by a lantern-catch *d* or other suitable fastenings. The top disk 6 of said body-section is provided with a semi-circular opening 4 therethrough, having at one edge offsets 2 and 3, that render the radial dimension of the opening at its various portions approximately the same as the diameters of the several coins, and preferably with an offset 1 of less dimension than either coin, the lesser-dimensioned portion being at one end and the greater-dimensioned part being at the other end of the opening, as best shown in Fig. 3.

The body-section is provided with a series of pockets 7 at the periphery of its disk, each containing a ball 9. The bottom of the pocket is inclined inwardly downward, (see Fig. 2,) so that when the disk is horizontal the ball normally assumes a position at the inner end of the pocket.

G indicates a semirotatable crown member or section arranged above the body-section F and having its bottom plate 12 centrally pivoted to the disk 6 by a suitable axis-stud at 13. The crown is provided with a central slot 15 in its top and with a coin receiving and guiding chute 14 at its interior. Said chute is secured to and opens through the plate 12 and is inclined or offset to register with the opening 4 at its lower end for presenting the coin thereto in transverse or radial position. The crown is also provided with a scalloped or internally-recessed rim 16, that surrounds the body in alinement with the ball-pockets 7.

I indicates a guard-disk arranged adjacently below the top of the crown and above the chute 14 and supported stationary by a standard 17, that extends through an open area in the plate 12 and is fixed to the disk 6 of the body-section. The disk I has a slot 18 therethrough which registers with the slot 15 and chute 14 when the crown G is at its primal position, so that a coin then dropped in the slot will pass down into the chute below said disk.

Fixed to the head-plate D and extending up within the cylindrical body-section there is a series of directing-chutes 20, 21, and 25,

the lower ends of which respectively open in suitable manner through the head-plate into the respective coin-receptacles C^{10} , C' , and C^5 , as indicated at e' and by dotted lines at e and e^2 , while their wider upper ends presentsuitable mouths beneath the opening 4 in the disk 6, the dividing-partitions 22 and 23 of said chutes approximately corresponding in relative position with the offsets 2 and 3 in the edge of the opening 4. (See Fig. 5, with dot-and-dash line indicating position of the opening.) The upper edge of the partition is concaved, as indicated in Fig. 2, to allow the depending edge of a coin to pass by the same as the crown is rotated. A stop lug or pin 24 is provided to prevent rotation of the crown beyond the desired limit. Said stop in the present instance contacts with one of the offsets 2 and with the edge at the extreme end of the opening.

In the outer side of each of the columns or coin-receptacles there is a zigzag slit 26, through which the edges of the contained coins 5 can be seen. The points of the zigzag are disposed at positions that relatively correspond with the thickness of a predetermined number of coins of the class for which the particular receptacle is designed, and figures may be marked on the column, as "25, 50, 75," &c., to denote the value of the contained coins up to any particular point of zigzag.

The operation is as follows: When the rotatable crown member G is at primal position, a coin can be dropped into the slot 15 and can pass into the chute 14 below the guard-disk I and is there stopped against the disk 6 by its edges striking the edges of the opening. The bank then being in upright position, the crown member G may be rotated or moved in the direction indicated by the arrow in Fig. 4, carrying the coin past the offset 1, where the radial dimension of the opening 4 is sufficient to allow the dime to fall through into the chute 20, which directs it into the receptacle C^{10} . If the coin is of larger size than a dime—as, for instance, a cent or a nickel—then the crown G must be rotated sufficiently far to traverse the end of the guide-chute along the opening 4, so as to carry the coin past the offset 2 in the case of a cent, which can then drop into the chute 21, that directs it into the receptacle C' , and in the case of a nickel to carry it past the offset 3, after which it can fall through the opening 4 into the chute 25, which directs it into the receptacle C^5 . When the crown commences its rotative movement, the slot 15 moves out of alinement with the slot 18 in the stationary disk I, thereby practically closing the opening against withdrawal of the coin, and when it has passed the first offset 1 the crown cannot be turned back until the coin is deposited in its proper receptacle, as the edge of the coin partially protruding through the plate 12 and disk 6 by catching against the offset prevents retractive

movement. Likewise a coin of larger dimension is prevented from retractive movement to the position of delivery of a smaller-sized coin. Rotative movement of the crown member G can be effected only when the bank is in upright position, since if the bank is inverted or tilted in either direction one or more of the balls 9 roll into half-way engagement with a recess in the scalloped rim 16, and thereby lock the crown against rotation. When the bank is placed upright, the balls run to the inner end of their pockets 7 and the crown is released. After a coin has been transferred into its proper receptacle the crown can be turned back to its primal position for receiving another coin at the slot.

I claim as my invention—

1. A coin-separating bank comprising a series of hollow columnar receptacles adapted to the size of different coins and mounted upon a base, a head-plate therefor, guide-chutes leading to the separate receptacles, an overlying plate or disk having an opening with offsets that conform portions of said opening above the respective chutes to correspond with the diametric dimensions of different coins, and a partially-rotatable top or crown member having an entrance-slot and guide-chute for presenting coins transversely to said opening.

2. A coin-separating bank comprising a plurality of tubular receptacles severally adapted to the size of different coins, a base or stand therefor, a head-plate uniting the upper ends of said receptacles and removably connected with the base, guide-chutes supported on the head-plate and leading into the respective receptacles, an overlying cylindrical cap its disk provided with a semicircular opening having offsets that conform portions of said opening above the chutes to correspond with the diametric dimension of different coins, a pivoted crown-section provided with an entrance-slot and a guide-chute, the lower end of which registers with said opening for presenting a coin transversely thereto, and means for automatically preventing rotation of said crown when the bank is in other than upright position.

3. A coin-separating bank comprising a plurality of internally-chambered tubular columns, a base-plate connecting the foot ends, and a head-plate connecting the top ends of said columns, a cylindrical head-section superimposed upon said head-plate, said head-section containing means for separating and directing different-sized coins into the different columns, the partially-rotatable cap or crown member having the slot and guide-chute for receiving the coin, and a stationary guard within the crown member for preventing the retraction of said coin after its reception in the chute and a slight movement of said crown member, substantially as set forth.

4. In a coin-separating bank of the char-

acter described, the combination, with the rotatable crown member having the entrance-slot, and the receiving guide-chute; of a stationary guard-disk disposed between said entrance-slot and guide-chute, said guard-disk having a slot therethrough that registers with said entrance-slot only when the crown member is at primal position.

5. In a coin-separating device, the combination of a disk or plate having a quadrant-shaped opening provided with offsets conforming consecutive portions of the opening to the diametric dimension of different coins, and a superimposed partially-rotative crown member having a guide-chute disposed therein for presenting coins in edgewise upright transverse relation to said opening and traversable along said opening, and means for separately receiving coins beneath the several offset portions of said opening.

6. In a coin-separating bank of the character described, the combination with the coin-receptacles, coin-separating means, and par-

tially-rotatable crown member having the coin-entering means; of the body-section provided with peripheral pockets having inwardly downward-inclined bottoms, a loose ball in each of said pockets, and the rotatable crown member having a scalloped or internally-recessed rim surrounding the ball-pockets, and engageable by said balls when the bank is tilted or inverted.

7. In a coin-bank of the character described, the tubular coin-receptacle provided with a continuous zigzag open slit in the side thereof, the points of the zigzag disposed at intervals to relatively correspond with the thickness of a predetermined number of the class of coins which such receptacle is designed to contain.

Witness my hand this 11th day of April, 1905.

ARTHUR B. FLAGG.

Witnesses:

CHAS. H. BURLEIGH,
CHARLES S. BACON.