March 14, 1933. H. OLSEN 1,901,529

COIN HANDLING MACHINE

Filed March 23, 1931 2 Sheets-Sheet 1

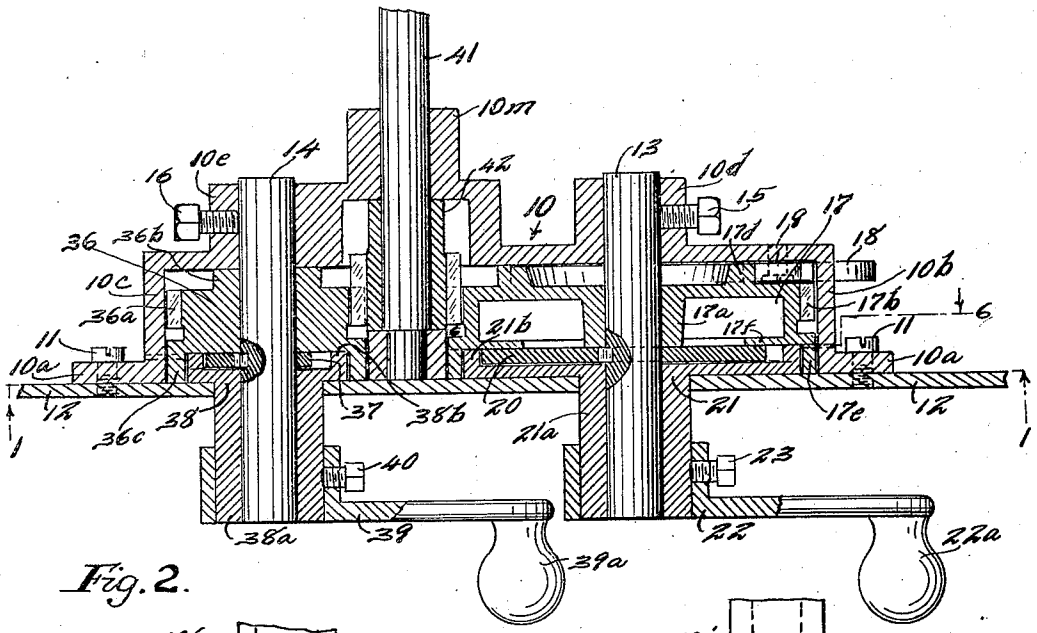


Fig. 2.

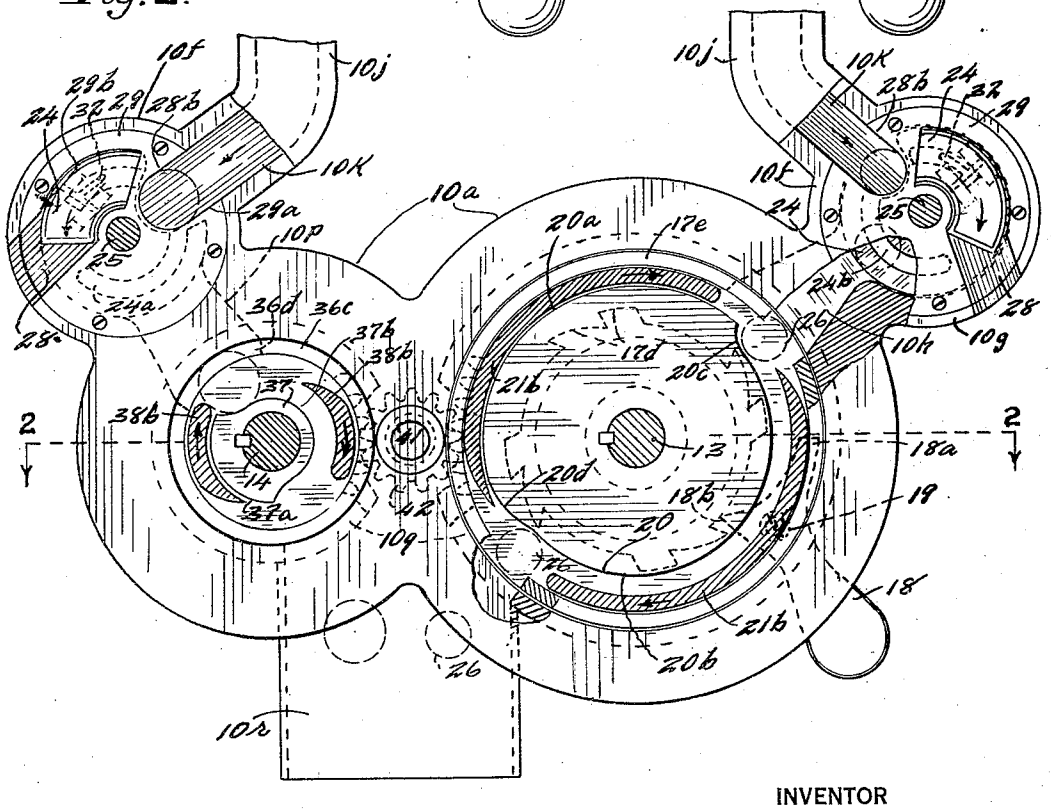


Fig. 1.

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COIN HANDLING MACHINE

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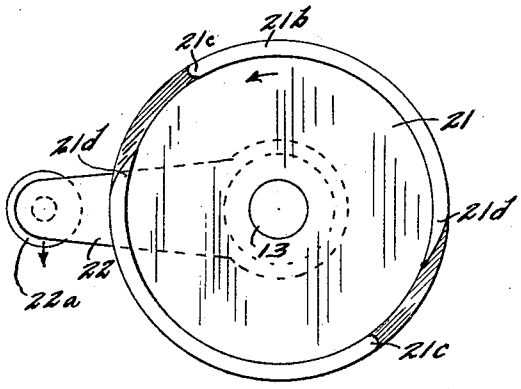


Fig. 5.

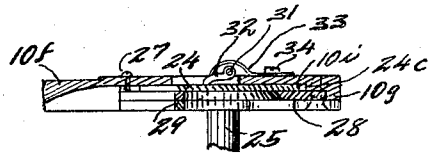


Fig. 4.

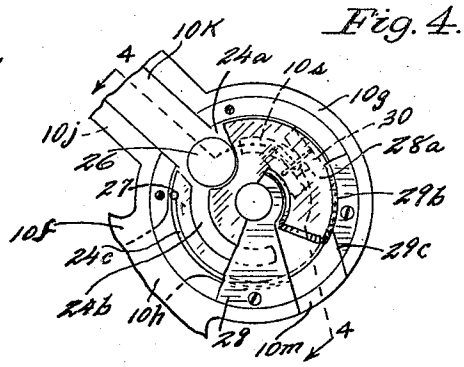


Fig. 3.

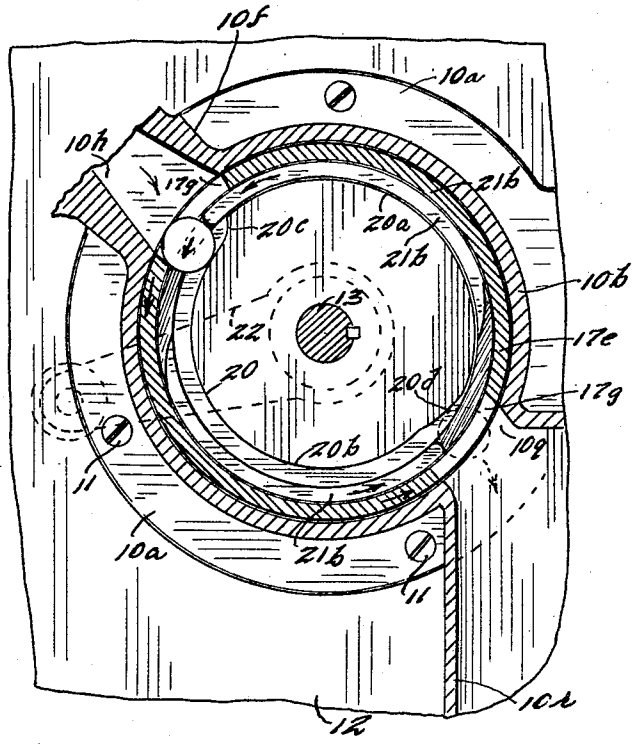


Fig. 6.

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UNITED STATES PATENT OFFICE

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COIN HANDLING MACHINE

Application filed March 23, 1931. Serial No. 524,505.

This invention relates to a coin operating device, and particularly to such a device which is operated for the purpose of dispensing an article. It is now common to have coin operated dispensing machines and while the present device is applicable to various dispensing machines, one practical use to which the device has been put is the operation of dispensing devices for bottled liquids. Some bottled liquids sell for ten cents a bottle, including the glass bottle, and it is desirable in a dispensing device for such goods, to have a coin operated device which will receive either nickels or dimes. It often happens that the passer-by or would be patron is not provided with a dime but will have two nickels. It is also desirable to have a coin operated device which is quite simple and which can be made rugged and will be easily operated.

It is an object of this invention, therefore, to provide a simple and efficient coin operated device of novel structure.

It is a further object of the invention to provide a coin operated device operated by a rotatable member for actuating the dispensing means.

It is a further object of the invention to provide a coin operated device comprising a casing having a cylindrical chamber, a member rotatable therein and having a cylindrical chamber thus having an annular wall, said casing and annular wall having openings therethrough for the passage of a coin, said member having means therein having a surface substantially parallel to said annular wall engageable by a coin to hold the same partly in the passage through said annular wall, and a member movable between said surface and annular wall for rotating said member to engage said coin and operating a dispensing mechanism.

These and other objects and advantages of the invention will be fully set forth in the following description made in connection with the accompanying drawings, in which like reference characters refer to similar parts throughout the several views, and in which:—

Fig. 1 is a view partly in front elevation and partly in vertical section, taken substantially on line 1—1 of Fig. 2;

Fig. 2 is a horizontal section taken on line 2—2 of Fig. 1, as indicated by the arrows;

Fig. 3 is a partial view in front elevation, certain parts being broken away;

Fig. 4 is a vertical section taken on line 4—4 of Fig. 3, as indicated by the arrows;

Fig. 5 is a view in front elevation in one part of the device; and

Fig. 6 is a view in vertical section taken on line 6—6 of Fig. 2.

Referring to the drawings, a device is shown comprising a casing 10 having a flange 10*a* extending about the greater portion thereof, which flange is secured by the screws 11 to a plate 12 which may form the front plate of the dispensing machine with which the device is used. The casing comprises portions 10*b* and 10*c* of general cylindrical form, which portions have therein cylindrical chambers. Said portions are provided with hubs 10*d* and 10*e* respectively concentric with said cylindrical chambers, and said hubs have secured therein shafts 13 and 14 respectively. The shaft 13 is shown as held in position by the set screw 15 and the shaft 14 is shown as held in position by the set screw 16, said set screws extending through hubs 10*d* and 10*e* respectively. A member 17 is disposed in the cylindrical chamber in portion 10*b*, which member is of general cylindrical or annular shape and has a hub 17*a* journaled on shaft 13. Member 17 at its periphery is provided with teeth 17*b* thus constituting a spur gear. The portion 10*c* of member 17 adjacent hub 10*d* which will be called the rear portion, is of smaller diameter than the portion 17*b* and is provided with a plurality of pairs of ratchet teeth 17*d* as shown in Fig. 1. These teeth are adapted to cooperate with a pawl member 18 extending through a slot in the cylindrical side of the portion 10*b* adjacent the rear of said portion and is pivoted on a stud 19 threaded into the rear portion of member 10*b*. Pawl 18 is formed at its outer portion with the rounded end constituting a counterweight and at its inner portion is provided with teeth-like portions 18*a* and 18*b* at opposite sides.

Member 17 at its front portion has an annular wall or flange 17*e* forming a cup-like front and a circumferential flange 17*f* extends some distance inwardly toward the hub 17*a*, the outer surface of the same meeting the inner surface of the flange 17*e* at a right angle. Said flanges 17*e* and 17*f* thus form an annular trough or chamber in the front portion of member 17. The shaft 13 has keyed thereto a plate 20, the front of which is shown in Fig. 1, said plate lying flat against the front of flange 17*f* and having one circumferential portion 20*a* parallel to and spaced from the inner side of flange 17*e* and having another circumferential portion or surface 20*b* spaced a greater distance from and substantially parallel to the inner surface of flange 17*e*, surface 20*b* at one end curving outwardly as shown at 20*c* to the portion 20*a* in a concave surface and at its other end extending outwardly to portion 20*a* as shown at 20*d* in a convex curve or surface. Another member 21 is journaled on shaft 13, the same having a hub 21*a* of cylindrical form which projects through and fits in an opening in the plate 12. Member 21 has a circular plate-like portion adjoining hub 21*a* and a circumferential flange 21*b* projects inwardly from this portion, thus forming a shallow cylindrical chamber. The flange 21*b* does not extend entirely about member 21 but is interrupted at opposite sides as shown in Figs. 1, 5 and 6. Said flange is thus divided into two portions, each of which has one end 21*c* of rounded form and has its other end 21*d* beveled to a point on a slight curve, the point of the flange being at the inner side thereof. When member 21 is in place as shown in Fig. 2, the flange 21*b* is disposed between the periphery of member 20 and the flange 17*e*. Hub 21*a* has fitted thereon the hub of crank handle 22 secured to hub 21*a* by the set screw 23, said crank 22 having a handle portion 22*a* at its outer end. The member 10 has a portion 10*f* projecting upwardly and outwardly therefrom at its upper right hand side as shown in Fig. 1, the portion 10*f* being substantially circular and having a circumferential flange 10*g*, thus forming a cylindrical recess in portion 10*f*. Some distance within flange 10*g* portion 10*f* is further recessed to form a chamber 10*i*, and this chamber is connected by a passage 10*h* to the cylindrical chamber in portion 10*d*, passage 10*h* being shown as flaring toward the portion 10*b*. The passage 10*h* alines with a passage 17*g* through the flange 17*e* and these passages are located so that their rear side is substantially flush with the front side of flange 17*f*. Member 17 has two of the passages 17*g* therein located at substantially diametrically opposite points. The recess within flange 10*g* has fitting therein a thin plate 24 which has secured centrally thereof and projecting outwardly therefrom axially of said recess a stem 25 which will extend beyond plate 12 and have a knob handle (not shown) secured thereto. Plate 24 has therein a notch or recess 24*a* having outwardly extending sides and a rounded bottom, said recess opening at the periphery of said plate, and a slot 24*b* concentric with the periphery of said plate extends at one side of recess 24*a* for a considerable distance, the slot passing through the plate 24. Member 10*f* has an upwardly projecting portion 10*j* shown in Figs. 1 and 3 and this has therein a slot 10*k* adapted to receive a coin such as a dime or silver ten cent piece 26. When recess 24*a* is in the position shown in Fig. 3, the coin 26 passing down slot 10*k* can pass thereinto as shown in Fig. 3. Plate 24 has formed adjacent its periphery a circumferential slot 24*c* which extends somewhat over 180° about its edge, and the end of screw 27 projects into this slot. When plate 24 is in the position shown in Fig. 3, screw 27 is at the end of slot 24*c* and plate 24 cannot be turned any further in a counter-clockwise direction. Another plate 28 overlies the plate 24 and the portion 10*f* within the flange 10*g* and this plate has therein and passing therethrough a slot 28*a* concentric with the stem 25 and having its sides sloping downwardly as shown in Figs. 1, 3 and 4. The bottom of slot 27*a* has a radial width somewhat less than the diameter of a dime. Plate 28 also has a slot 28*b* therein substantially the same size and adapted to aline with the recess 24*a*. Another plate 29 overlies plate 28 and this also has a recess 29*a* therein which alines with recesses 24*a* and 28*b*. Plate 29 has another slot or recess 29*b* therein, part of which is shaped the same and coincides with the slot 28*a*, but which also includes a straight portion 29*c* extending to the flange 10*g* at a point substantially opposite the slot 10*k* and said flange 10*g* also has an opening 10*m* alining with portion 29*c*. Portion 10*f* has secured to its rear side bearings 30 in which is journaled a small pin or shaft 31 to which is secured between said bearings a pin 32. Pin 32 is normally urged forwardly by a sear spring 33, one end of which bears against said pin and the other end of which is secured to the back of portion 10*f* by the screw 34. Pin 32 projects through a slot 10*s* in portion 10*f*.

The portion 10*c* of casing 10 as stated has therein a cylindrical chamber and a member 36 is disposed in said chamber, said member being of substantially the same shape as the member 17 although of smaller diameter and comprising an external spur gear portion 36*a* and a rear hub portion 36*b* engaging the bottom of the chamber in portion 10*c*. Member 36 has a flange or wall 36*c* at its front portion defining a cylindrical chamber, and a plate member 37 is keyed to the shaft 14 and lies flat against the bottom of this chamber. Member 37 as shown in Fig. 1 has a circum-

ferential portion 37*a* spaced from and parallel to the inside of flange 36*b* and has another circumferential portion 37*b* spaced a greater distance from and also parallel to the inner side of flange or wall 36*b*, the surface 37*b* merging into the surface 37*a* in concave curved surfaces. A member 38 is also journaled on the shaft 14, the same having a cylindrical portion received within the flange 36*b* and a hub portion 38*a* extending through and fitting in an opening in the plate 12. Member 38 has a flange 38*b* which is disposed between member 37 and the inner side of flange 36*b* and this flange 38*b* is in two portions shown in section in Fig. 1, where it will be seen that one end of each portion is rounded, while the other end is tapered on a convex curve, the point being at the inner side of the flange. Member 38 is similar in all respects to member 21 except that it is of smaller diameter. A crank handle 39 is secured to the outer end of hub 38*a* by set screw 40, which crank handle has a handle portion 39*a* at its outer end. The casing 10 has another portion 10*f* extending upwardly from portion 10*c* which is similar in all respects to the portion 10*f* already described, except that the extension 10*j* extends upwardly to the right as shown in Fig. 1, whereas the portion 10*j* at the other side extends upwardly to the left. Portion 10*f* has therein the plates 24, 28 and 29 as already described, as well as the stem 25. Pin 32 and associated parts are also duplicated. The member 10 has between the hubs 10*d* and 10*e* another hub 10*n* in which is journaled a shaft 41. This shaft has secured thereto within the casing 10 a gear 42 which meshes with the gear portions 17*b* and 36*a*. Shaft 41 is also journaled in a bearing formed in the front portion of casing 10. A passage 10*p* leads from portion 10*f* into the cylindrical chamber in portion 10*c* and the wall or flange 36*b* has a passage 36*d* therethrough adapted to aline with passage 10*p*. The casing 10 also has passages 10*q* leading from the cylindrical chambers in portions 10*b* and 10*c*, which passages are substantially diametrically opposite respectively the passages 10*h* and 10*p* and the passages 10*q* open into a downwardly extending chute 10*r*.

In operation the shaft 41 will be connected to a dispensing mechanism so that when it is turned a certain amount, an article will be dispensed. When a patron wishes to secure an article which sells for ten cents, he will place a ten cent piece in the spout 10*j* shown at the right of Fig. 1. The coin 26 will travel down into the position shown in Fig. 3, or to the dotted line position shown in Fig. 1. At this time the recess 24*a* is in the position shown in Fig. 3 so that the coin will pass thereinto. The member 24 and stem 25 may be, if desired, turned to this position by a torsion spring. The operator having placed a coin in the slot now turns stem 25 to the right, or in a clockwise direction. Plate 24*a* moves in a clockwise direction and the coin is carried around in recess 24*a* until said recess alines with passage 10*h*, when the coin will pass through passage 10*h* and will also pass into passage 17*g* until it strikes the surface 20*b* of member 20, as shown in Fig. 1. The dime or ten cent piece travels beneath plates 28 and 29 and its edges are beneath the plate 28. If a person should put in a smaller coin than a dime, such as a street car token, when the plate 24 is turned, the small coin would pass over pin 32 and said pin would be pushed upwardly by spring 33, said pin passing through the slot 24*b* and the pin would throw the small coin out through the slots 28*b* and 29*a* in the plates 28 and 29. Should a coin or slug having a hole therethrough be placed in the machine, the pin 32 will spring into the hole so that the coin will not operate the machine. After the coin has dropped down into contact with member 20, the patron, following the directions, will turn crank 22. This will turn member 21 and the rounded end 21*c* of one of the flange portions of flange 21*b* will move into the position shown in Fig. 1 and engage the coin. The coin will now be pushed against the lower edge of slot 17*g* and will lock member 21 to member 17. As the crank 22 is turned, therefore, member 17 is turned. When member 17 turns, it operates through its gear teeth 17*b* the gear 42 and shaft 41 is turned. Member 17 is turned about one-half revolution until the coin reaches the opening 10*q*, when it will pass out through the opening 17*g* and through the opening 10*q* to the chute 10*r* to the cash box. Shaft 41 has been turned sufficiently to dispense the article. Should the patron not have a dime, but have two nickels or five cent pieces, he will use the spout 10*j* shown at the left in Fig. 1. The coin will travel down as already described into the recess 24*a* of plate 24 and the patron will turn the stem 25 in a counter-clockwise direction. The slot 28*a* is of a width so that the edges of the nickel will be disposed under the plate 28. Should a coin or piece which is narrower than the slot 28*a* be placed in the machine, it will be thrown out by pin 32 which will snap up through the slot 24*b* and eject the coin. When plate 24 has been turned sufficiently, recess 24*a* will aline with passage 10*p* and the nickel will drop down through this passage and through opening 36*d* into contact with surface 37*b* of member 37 as shown in Fig. 1. The patron will now turn crank 39 in a clockwise direction, and this will turn member 38. The rounded end of one portion of flange 38*b* will then engage the nickel or coin and the edge of the coin will be pushed against the edge of slot 36*d* and member 36 will be turned with member 38. This movement of mem-

bers 36 and 38 together will continue until the coin reaches the opening 10*q* when it will pass out through said opening and into the cash box through chute 10*r*. The gear portion 36*a* of member 36 is just one-half the size of gear portions 17*b*, or in other words, has one-half as many teeth. The stated movement of member 36, therefore, is not sufficient to turn gear 42 to have another article dispensed. The patron therefore must place another nickel in the machine, and when this is engaged by the flange 38*b* and member 36 again turned, the gear teeth 36*a* will again turn gear 42 so that the gear will now be turned sufficiently to turn shaft 41 far enough to dispense the article. It therefore takes two operations of member 36 in turning gear 42 and shaft 41 to dispense the article so that the patron must place two nickels in the machine. It will be seen that when the coin is moved around by the ends of flanges 21*b* or 38*b*, that the curved portion 20*d* of member 20 or the corresponding portion of member 37 will move or cam the coin toward the discharge outlet. The dog 18 prevents a counter-clockwise movement of member 17 or of either crank 22, as the tooth 18*b* will engage with one of the teeth 17*d* and prevent any reverse movement. Since member 17 cannot move, member 36 which is connected thereto through the gear 42 also cannot move reversely. The dog 18 also operates to prevent spinning of the member 21 when there is no coin in the machine, as the wider teeth 17*d* act on the dog and swing the teeth 18*a* into engagement with the next tooth. It will be seen from the position of the device in Fig. 1 that the counter weight portion of pawl 18 hangs downwardly so that the tooth 18*b* is in position to engage the ratchet teeth 17*d* to prevent any reverse movement of member 17 or crank 22. When tooth 18*b* is engaged by the tooth 17*d* adjacent the ratchet tooth, it is oscillated so that tooth 18*a* is brought into engagement with the ratchet and the pawl thus acts somewhat as an escapement, and as stated, prevents spinning of member 17. The dog must thus be continuously operated and it slows up the movement of the member 21. It will be seen that if there is no coin in the machine, that when cranks 22 and 39 are turned, the members 21 and 38 will simply revolve idly on the shafts 13 and 14. The pointed ends of flanges 21*b* and 38*b*, when members 21 and 38 are turned in a counter-clockwise direction, will cam the coin in slots 17*g* and 36*d* respectively back into the passages 10*h* and 10*p* respectively. It is thus necessary to turn the members 21 and 38 in a clockwise direction to operate the machine.

From the above description it is seen that applicant has provided a simple and efficient coin operated device for receiving a coin and operating a dispensing mechanism. The device is quite rugged and yet it is easy to operate. The coins are positively handled and the machine will not operate unless a proper coin is placed therein. All of the parts are held within the one casing, which can be integrally made and this casing is tightly closed by the plate 12. There are no small or delicate parts in the device and there is no danger of the same getting out of order. The device has been amply demonstrated in actual practice and found to be very successful and efficient.

It will, of course, be understood that various changes may be made in the form, details, arrangement and proportions of the parts, without departing from the scope of applicant's invention, which generally stated, consists in a device capable of carrying out the objects above set forth, in the parts and combination of parts disclosed and defined in the appended claims.

What is claimed is:—

1. A coin operated device having in combination, a casing, a member freely movable in said casing and adapted to actuate a dispensing mechanism, said casing having a wall adapted to retain a coin and provided with inlet and outlet passages for said coin, a second member having a surface spaced from and parallel to said wall to define a runway for said coin, and a third member having a portion movable in said runway to engage the edge of said coin therein and move said first mentioned member thereby, said second member being means thereon for causing said coin to move toward said outlet passage.

2. A coin operated device having in combination, a casing, a member freely movable in said casing and adapted to actuate a dispensing mechanism, said member having a wall adjacent said casing and forming a cylindrical chamber in said member, said casing and wall having a passage therethrough for the passage of a coin, a second member disposed in said chamber having a peripheral surface parallel to the inner side of said casing and engageable by said coin to hold said coin partway in said passage and form a guide means for the edge of said coin, and a member movable between said surface and the inner side of said wall to engage one edge of said coin and move said first mentioned member by engagement of the edge of a coin therewith at said passage.

3. A coin operated device having in combination, a casing having a cylindrical chamber therein, a member disposed and rotatable in said chamber having an annular wall movable adjacent the wall of said chamber, said casing and wall having alining passages therethrough to permit the passage of a coin, means disposed within said annular wall having a surface substantially parallel therewith to hold the coin partly in said passage and to form with said casing and annular

passage for said coin and having a portion of its periphery shaped to form an ejecting means for said coin, and a member having a portion movable between said surface and said annular wall to engage said coin and rotate said first mentioned member by engagement of the coin therewith, said coin moving with its central axis parallel to the axis of said rotatable member.

4. A coin operated device having in combination, a cylindrical casing, a member rotatable therein having an annular wall, said casing having a passage therethrough adjacent its upper side and having a passage therethrough adjacent its lower side for the passage of a coin, said annular wall having a passage adapted to aline with said passages, a second member disposed within said member and having a peripheral surface a portion of which is parallel to said annular wall and engageable by a coin passing through said openings to hold said coin partly in the opening in said first mentioned member, another portion of said peripheral surface being formed as a cam to move said coin through said lower passage, said coin moving with its central axis parallel to the axis of said first mentioned member, and a third member rotatable in said second member having a portion disposed between said surface and wall to engage said coin and rotate said first mentioned member.

5. A coin operated device having in combination, a casing having a cylindrical chamber therein, a horizontal shaft secured in said casing axially of said chamber, a member rotatable in said chamber journaled on said shaft and having a cylindrical chamber therein thus having an annular wall and having a flat surface adjacent said wall at right angles to its axis, said casing having passages therethrough located above and below said shaft respectively for the passage of a coin, said annular wall having a passage therethrough adapted to aline with said passages, a plate secured to said shaft having a surface parallel to said annular wall and engageable by a coin to hold the same partly in said passage through said annular wall, and a member rotatable on said shaft having an annular portion rotatable between said surface and annular wall to engage said coin and move the same against said first mentioned member to rotate the same, said flat surface acting as a guide for the flat side of said coin, whereby said passage through said annular wall is moved from the passage in said casing above said shaft to the passage in said casing below said shaft and said coin drops through the latter passage.

6. A coin operated device having in combination, a casing having cylindrical chambers therein, a shaft secured in each chamber axially thereof, rotatable means connected to said shafts for operating a dispensing mechanism, a member rotatable on each of said shafts and disposed in each of said chambers, each of said members having a cylindrical chamber therein, said casing having at the upper side of said shafts passages leading into the chambers therein respectively adapted to permit coins of one size to pass into one chamber and coins of a different size to pass into the other chamber, means associated with each chamber for receiving and guiding a coin to said passages, said members having openings therethrough alining with the openings in their respective chambers to permit the passage of a coin thereto, and rotatable means on each of said shafts adapted to engage said coins and rotate the members journaled on said shafts respectively by said coins said casing having passages leading from said chambers for the discharge of coins, one of said shafts being connected to said first mentioned means with a one-to-one ratio, and the other shaft being connected to said means in the ratio of the value of said coins.

7. A coin operated device having in combination, a casing having a chamber therein, said casing having a passage therethrough for the passage of a coin, a member movable in said chamber, means connecting said member to a dispensing mechanism, said member having means for receiving a coin through said passage, a member engageable by said coin to hold it in a certain relation to said member and to guide it in movement of said member, and a third member movable relatively to said last mentioned member to engage the edge of said coin and push the same with its edge against said first mentioned member to move the latter, said casing having a discharge outlet for said coin and said second member having means for moving said coin towards said outlet.

8. A coin operated device having in combination, a casing having a cylindrical chamber therein, said casing having an inlet passage for a coin and an outlet passage for a coin, a member rotatable in said chamber and also having a chamber therein, a stationary plate disposed in said latter chamber, said member having a passage through which a coin can pass from said inlet passage to said latter chamber, said plate having a surface engageable by said coin to hold the same partly in said last mentioned passage, said surface being formed to guide said coin in said latter chamber and move the same toward said outlet passage, and a member rotatable in said last mentioned chamber between said plate and said member for engaging said coin and pressing the same against said member to rotate the same and to move said coin to said outlet passage, said member being thus rotated to actuate said dispensing means.

9. The structure set forth in claim 8, said

last mentioned member having means thereon preventing reverse rotation thereof.

10. A coin operated device having in combination, a casing having a chamber therein, a shaft secured in said casing extending through said chamber axially thereof, a member journaled on said shaft having a spur gear formed on its exterior, a gear meshing with said gear, a shaft secured to said latter gear adapted to operate a dispensing mechanism, said member having a cylindrical chamber therein, said casing having an inlet passage for a coin, and an outlet passage for a coin, said member having a passage for a coin to pass from said inlet passage to the chamber therein, a plate secured to said shaft and disposed in the passage in said member adapted to be engaged by said coin to hold the said coin in abutting relation to said member, and having a surface parallel to the internal surface of said chamber, and a member journaled on said shaft having a flange adapted to pass between said plate and member in the chamber in said member to engage said coin and move the same against said member to rotate said member, said plate having a surface adjacent said outlet opening to direct said coin towards said outlet opening.

11. The structure set forth in claim 10, a plate secured to said casing having an opening therein, said last mentioned member having a hub projecting through said opening and means secured to said hub for rotating said last mentioned member.

12. The structure set forth in claim 10, said first mentioned member having a portion with ratchet teeth thereon and a pawl pivoted to said casing having a toothed portion extending into said casing to engage said teeth and having a handle portion extending to the outside of said casing.

13. A coin operated device having in combination, a casing, a shaft journaled in said casing, a gear on said shaft, a pair of shafts secured in said casing and disposed at either side of said shaft, members journaled on said last mentioned shafts respectively, each formed as a spur gear meshing with said first mentioned gear, separate means for rotating said last mentioned members respectively by means of a coin, said casing and members having passages extending therethrough for receiving said coin, one of said members being adapted to receive a coin of one size and the other member being adapted to receive a coin of a different size, said casing having outlet passages for said coins to which said coins are moved by said members.

14. A coin operated device having in combination, a casing, a shaft journaled in said casing adapted to operate a dispensing mechanism, a gear secured to said shaft, a pair of members rotatable in said casing having gears thereon meshing with said first mentioned gear, separate means for respectively rotating said members by means of coins of different sizes, said members being rotated in the same direction, and means engaging one of said members for preventing rotation thereof in the opposite direction.

15. A coin operated device having in combination, a casing, a member freely movable in said casing, said casing having a wall, said member having a flange adjacent said wall and having a flat surface extending substantially at right angles to said flange, a second member having a surface spaced from said wall to define a runway for said coin, said coin moving with its flat side parallel to said flat surface, and a member movable in said runway for engaging the edge of said coin and moving it against said first mentioned member to move the latter, said first mentioned member having openings forming an inlet and outlet for said runway, said second member having a portion for camming said coin towards said outlet.

16. A coin operated device having in combination, a casing having a cylindrical chamber therein, a shaft secured in said casing extending through said chamber coaxially therewith, a member rotatable on said shaft adapted to operate a dispensing device having a flange movable close to the wall of said casing, said member having a flat surface at right angles to its axis adjacent said flange thus having a cylindrical chamber therein, said casing and flange having inlet and outlet passages for coins therethrough, a disk secured to said shaft having one side against said flat surface and having a peripheral surface spaced from and parallel to the inner wall of said flange and casing, a disk-like member journaled on said shaft and having a flange disposed and movable between said first mentioned flange and disk to move a coin against said first mentioned member at one of the passages therethrough to turn the same, the inner wall of said casing and periphery of said disk forming guides for the edge of said coin and said flat surface forming a guiding surface for the flat side of said coin.

17. A coin operated device having in combination, a casing having a pair of cylindrical chambers therein, a shaft secured in each of said chambers and coaxial therewith, a third shaft adapted to operate a dispensing mechanism, a member rotatable on each of said first mentioned shafts and disposed in said chambers respectively, each having a periphery formed as a gear, a gear secured to said third shaft and meshing with said gears, each of said members having a cylindrical chamber therein, said casing having at the upper side of said shafts passages leading into said chambers respectively adapted to permit coins of one size to pass into one chamber and coins of a different size

to pass into the other chamber, and having openings below said shafts respectively for the exit of said coins, said members having openings therethrough respectively alining with the openings in their respective chambers to permit the passage of a coin thereto, and rotatable means on each of said shafts adapted to engage said coins to press the same against said members to rotate said members, the gear on one of said members having a ratio of one to one with said third gear and the gear on said other member having a ratio to said third gear the same as the ratio of the value of said coins.

18. A coin operated device having in combination, a casing having a cylindrical chamber, a shaft secured to said casing and projecting through said chamber coaxially therewith, a member fitting in said casing and journaled on said shaft adapted to operate a dispensing mechanism, said member having an annular flange at one side substantially engaging the wall of said casing at the front open side thereof, said casing and annular flange having openings therethrough for the passage of a coin, said casing having an open side and said flange having an edge substantially flush with this open side, said member having a flat surface adjacent said flange at right angles to its axis, a disk secured to said shaft having one side engaging said flat surface, said disk having a periphery spaced from the wall of said flange and casing and concentric therewith to define a passage for a coin, a plate extending across and closing the open side of said casing, and a disk-like member between said plate and said disk having a flange projecting into the annular space between the periphery of said disk and the inner side of said flange, said flange having openings at substantially opposite sides to divide the same into two portions, and means for rotating said last mentioned member whereby a coin may pass through the passages in said casing and first mentioned flange to engage the edge of said disk and can be engaged by the edge of one of the flange portions of said last mentioned member to push the same against the flange of said first mentioned member at one of said passages to rotate the latter and operate the dispensing mechanism.

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